82794

EXTERNAL EVALUATION OF THE IMPROVING THE EFFICIENCY OF EDUCATION SYSTEMS (IEES) PROJECT

Prepared for

The United States Agency for International Development
Bureau of Science and Technology
Office of Education
Washington, D.C. 20523

Prepared by

Creative Associates International, Inc.
5301 Wisconsin Avenue, N.W.
Suite 700
Washington, D.C. 20015

April 1993

Contract No. PDC-5832-I-00-0095-00
Delivery Order No. 25

TABLE OF CONTENTS

LIST OF ACRONYMS

ABEL	Advancing Basic Education and Literacy
AED	Academy for Educational Development
A.I.D.	Agency for International Development
BPEP	Basic and Primary Education Project
CJSS	Community Junior Secondary Schools
COP	Chief of Party
CTO	Cognizant Technical Officer
EMIS	Education Management Information Systems
EPP	Education Policy and Planning
FSU	Florida State University
FY	Fiscal Year
IBRD	International Bank for Reconstruction and Development
IEES	Improving the Efficiency of Educational Systems
JSEIP	Junior Secondary Education Improvement Project
LDC	Lesser Developed Country
M&S	Manpower and Statistics
MFDP	Ministry of Finance and Development Planning
MOE	Ministry of Education
MOEC	Ministry of Education and Culture
MOFP	Ministry of Finance and Planning

PASE	Programme d'Ajustement du Secteur de l'Education (Education Sector Adjustment Program)
PIMS	Project Implementation Monitoring System
PIO/T	Project Implementation Order for Technical Services
P&E	Programme and Evaluation
R&D/ED	Research and Development/Education
RFP	Request for Proposal
RTA	Resident Technical Adviser
SOW	Scope of Work
SUNY	State University of New York
TA	Technical Assistance
TDY	Temporary Duty
TU	Tribhuvan University
USAID	A.I.D. Field Mission

EXECUTIVE SUMMARY

This is a report of a formative evaluation. The primary purpose is to make recommendations to the Cognizant Technical Officer (CTO) as to what the Improving the Efficiency of Educational Systems (IEES) project should concentrate on until the project terminates in July of 1994. Because it is a "formative" evaluation, it takes a limited view of the project and does not try to document the eight-year experience of the total project. This report does not try to include activities carried out since the field evaluation phase was completed. Both of these will be included in the final summative evaluation.

At the time the evaluation began, project activities had already begun to phase down. The only field Mission buy-in program remaining was in Guinea, where no IEES core funds were being expended. By the time the field visits were completed, the only IEES-funded Resident Technical Adviser (RTA) remaining in the field was in Nepal. Research activities in Botswana were almost complete. Research activities in Nepal were entering a final phase and will end early in 1993. The only other country in which activities were under way was Indonesia. The Scope of Work (SOW) of the evaluation did not permit a visit to Indonesia. Field activities there are being carried out by local researchers, with short-term inputs by visiting U.S. researchers, and with support of a local administrative person.

Activities in Somalia, Haiti, and Liberia had been terminated due to political and/or security considerations. Activities in Yemen had been limited in nature and were complete. These four countries likewise were not visited nor considered in the evaluation.

Based on visits to Nepal and Botswana and review of documents, it was found that implementation of sector reviews, a major activity of Phase I carried over into Phase II, had and continues to have a major positive impact. Neither country visited, however, felt that an update was called for before the IEES project terminated.

In Phase I, research was seen as a tool to train, to build institutional capability, and most of all, to inform those making policy and planning decisions. In Phase II, the initial intent of Research and Development/Education (R&D/ED) was to shift the emphasis toward research that would have an impact on the broader development community. Dissemination in Phase II was to be through academic journals, conferences, and international meetings, all avenues where higher caliber research is disseminated. Hence, in Botswana and Nepal, consulting firms and local university faculty and U.S. consultants, rather than Ministry of Education (MOE) staff were engaged to conduct the research. The participation of the government in conducting the research was not major, hence institution-building in the MOEs in the conduct of research was negligible. However, in all three countries remaining active at the time of the evaluation, research topics were those of prime importance to the Government. Their perception was that the research topics were at variance with the options presented by the IEES project, and it was through discussions with IEES that the topics of interest to them were agreed upon.

Educational and/or policy and planning research undertaken in each country as a part of the IEES project varied as greatly between countries in Phase I as it did in Phase II. In Indonesia, the studies in both phases concentrated mainly on policy and planning issues, using the internal/external efficiency models which were central to the driving paradigm of the project. In Nepal, during the second phase, research was limited to a study of causes of dropout and repetition in the first grade, an issue of great interest to the MOE. During both phases in Botswana, there was heavy emphasis on classroom research in an attempt to illuminate classroom processes, the teachers' and headmasters' roles in the classroom, and related issues.

It is difficult to identify the immediate impact of the research and other studies carried out by the project. We recommend that during the final months of the project considerable attention be focused on determining the utility of the various products of the project. The perceptions of Lesser Developed Country (LDC) officials and educators should be compared with the perceptions of project personnel.

The nature of the research studies in Phase II facilitated the publication of the research in internationally significant journals and other publications, mostly in the United States. This makes it unlikely that many LDC teachers and educators would have access to the material and, even if they did, be able to appreciate its significance. It is also unlikely that local personnel will continue these kinds of studies. We therefore recommend that the final stages of the project examine how research approaches can be stripped to the essentials needed to gather and analyze useful information in the local context of each country.

The overall driving paradigm of the project involved systems approaches to planning and educational reform, using largely quantitative input/throughput/output models at the policy research level and highly structured observation and interview models at the classroom research level. We recommend that in the final phases of the project these models be subjected to careful scrutiny in light of the experience of IEES field activities. Can or should these models be applied in all countries? What has project experience shown to be the utility and limitations of such models? What alternative paradigms might be examined in the future when similar educational development efforts are attempted? What has project experience shown in terms of the tenuous relationship between most educational research and policy formulation?

The level of resources allocated to a particular country was not always sufficient relative to the magnitude of the objectives pursued. Where the necessary threshold of investment was not reached, lasting impact will probably be minimal. Where it was reached, impact appears to be significant and likely to last. The Agency for International Development's (A.I.D.) organizational propensity to favor fewer but larger activities as a way to maximize return on investment seems to be supported to some extent by the experience of this project, especially if the goal of the project is to affect overall reform at the national level. The extent and quality of the participation of MOE officials appears to be an important element. The critical mass theory holds. At the time of the evaluation team visits to Nepal and Botswana, the lone RTAs, who had limited resources at their disposal, were not participating in the planning and policy making process other than by filling requests for information. Except in Indonesia, direct impact of research findings at this time appears to be minimal. The exceptions are the

Sector Reviews which had and continue to have influence on planners and s, both within the Ministries and with external donors, even though they have not been updated recently.

It is probable that the Education Management Information Systems (EMIS) operating in Nepal and Botswana will not be maintained after the departure of the RTAs, unless another donor accepts responsibility for providing resident technical assistance. They could well cease to function because the trained personnel now in place to operate the systems will leave for higher paying jobs, as have several before them. In Botswana, this was happening as the RTA was departing post. If the EMIS is indeed shut down, further updates of the sector assessments will be more difficult. In Indonesia, the sheer size of the unit operating the EMIS will ensure that as people leave, a core will remain capable of training others.

Management of the project by A.I.D. suffered from a lack of continuity, especially during and after the transition from Phase I to Phase II. There were changes in emphasis in the contract with Florida State University (FSU). It was reported that the interpretation of the contract by the four different A.I.D. project managers during this period also lacked consistency.

The buy-in feature of the project provided the Missions with a convenient means to identify and contract with a provider of technical assistance. However, Missions found it cumbersome and slow to relate to the contractor when their lines of communication and authority were through the A.I.D./Washington CTO, and not directly with the contractor. This could have been prevented if Missions had instructed the contract officer in the Project Implementation Order for Technical Services (PIO/T) to structure the Task Order to return to the Mission for management, any funds it deemed necessary to more directly control the activity. This would have increased the Mission management load but it would also have given the Mission more control of the activity.

Recommendations

1. Continue field activities in Indonesia using short-term assistance with the objective of supporting the decentralization of educational planning.

2. Terminate field activities in Nepal when present RTA leaves and the ongoing research is completed.

3. Do not support activities in Botswana after present research is completed.

4. Continue activities in Guinea under the Mission buy-in. Exercise caution if the scope of activities is expanded.

5. Examine any activities proposed for Haiti to ensure they can be completed before the end of the IEES project.

6. Place emphasis on organizing, synthesizing,and packaging the body of knowledge, experience, and tools in a form usable by LDC and donor community field practitioners. The Manual on Sector Assessment is a useful example.

7. Synthesize the results of the body of research done under the project into a form that can be readily understood by policymakers and planners in LDCs.

8. Convene a group of practitioners to review the collected research before it is published in order to ensure maximum usefulness. Field practitioners should constitute the core of the reviewers.

9. Formulate and implement an aggressive dissemination distribution plan, either through the IEES project or another R&D/ED project.

10. Make funds available for the A.I.D. project manager to visit the two remaining field sites, Indonesia and Guinea, before the final six months of the project.

11. Review the underlying paradigm of the project in light of the experience of the past eight years. See Annex A for a discussion of this issue.

INTRODUCTION

The Improving the Efficiency of Education Systems (IEES) project is a 10 year activity, divided into two 5-year phases. Phase II was 20 months from completion when the evaluation started.

The basic objective of this formative evaluation is to recommend to A.I.D. what Florida State University (FSU) might best do during the remainder of the project to further the achievement of the project objectives. The evaluation team was also asked to make preliminary judgements as to the contributions the project has made to furthering the objectives of the Research and Development/Education Office (R&D/ED).

The evaluation team reviewed Phase I activities, previous evaluations, reports, research findings, and planning documents. Interviews were held with principle participants, both in person and by telephone. Visits were made to two participating countries: Nepal and Botswana. Indonesia, the country to which the most resources were allocated, was not visited because the bilateral funded Education Policy and Planning (EPP) Project, a buy-in to the IEES project, was just completed. In addition, the final external evaluation of the EPP Project in Indonesia, which also included the IEES program, had just been completed. A final summative evaluation of the Junior Secondary Education Improvement Project (JSEIP) in Botswana, also implemented as a buy-in to the IEES project, is being planned. A mid-term evaluation of the Guinean Government's Education Sector Adjustment Program (PASE) that is to begin in March will also evaluate the IEES-implemented technical assistance component. These will contribute greatly to the final summative evaluation.

Limitations

The scope of work for the evaluation was overly ambitious compared to the resources available. It was therefore agreed to concentrate on the formative aspects of the task. The project had already begun to greatly reduce the level and extent of its activities. At one time the project had a presence in eight countries; by the mid-point of the evaluation a Resident Technical Advisor (RTA) was present only in Nepal, and he will depart in April of 1993. There was considerable activity in Indonesia using short-term advisors, and the remaining research activities in Botswana were almost complete. Therefore, the extent of ongoing field-based activities about which one could make formative recommendations was rather limited. A further limitation was that some of the studies and reports of the Indonesian activities were available only in Bahasa Indonesian, and it was not possible for the team to review them.

PROJECT BACKGROUND AND TRANSITION TO PHASE II

The overriding goal of the project was to improve the efficiency of educational systems. The following assumptions upon which the project were based are important in understanding the evolution of the project activities:

1. Access to basic education in the third world is limited. Primary school effectiveness is constrained by high dropout and repeater rates. Access is especially low for girls and rural populations.

2. Demand for schooling is growing faster than resources, resulting in declining school quality and, in some cases, basic literacy rates.

3. More careful use of scarce resources could yield cost savings that would result in improved quality of schooling.

4. Historical project approaches have dealt with limited aspects of the system and failed to improve long run management. Project inputs have failed to motivate the governments to deal with macro policy and fiscal issues.

5. Long-term technical assistance is needed to build information, skills, and the trust between donors and Lesser Devevoped Countries (LDCs) required to address policy and budget issues. Assistance must be in both planning and education Ministries.

6. Donors should encourage LDC governments to share information on common problems.

The field activities carried out in Phase I initially centered on a series of Sector Assessments that identified further activities and led to the formulation of the Country Implementation Plans. Ultimately IEES was active in eight countries. The programs emphasized the establishment of Education Management Information Systems (EMIS), training, provision of technical assistance to planning and policy units, and planning and policy-oriented studies. Large buy-in activities in Haiti, Botswana, and Indonesia resulted from the findings of Sector Assessments.

The following three major areas of success were noted by the mid-term evaluation:

1. The Sector Assessments were successful in identifying efficiency related issues and necessary actions.

2. IEES resources helped governments and USAID Missions identify and plan new projects.

3. Development of information systems to inform policy and planning was widely supported in the IEES countries.

The mid-term evaluation applauded the long-term nature of the effort and the efforts to involve Ministry of Education (MOE) officials in the conduct of the sector reviews.

The mid-term evaluation raised the following questions:

1. Was the information collected for the EMIS reliable and useful? That is, was it the right information and would it be useful for central planners and school officials?

2. Though IEES staff working in different countries had frequent discussions, what was the extent and intensity of cross-country dialogue between ministry officials?

The mid-term evaluation also discussed several objectives that the project had not yet met, and on which it should concentrate in the second phase. Key suggestions included the following:

1. Strengthen the in-country research capacity.

2. Do more synthesis and dissemination of IEES analysis and training tools.

3. Encourage coordination of donor activities.

4. Reduce the volume of reporting in favor of a system that documents project effects, lessons learned, implementation problems, and more significantly, actual impact on efficiency in school systems.

5. Encourage the production of more substantive papers, analytical tools, and training materials. The evaluation commented on the need to produce publications that better served s, donors, and scholars.

The mid-term evaluation also noted comments by project staff that the A.I.D./Washington project management contributed to delays in approving basic documents and authorizations and rarely visited field sites. Finally, the evaluation asked whether there was a cohesive knowledge-building agenda. It noted that research centered on three discrete topics, but that other analytical activities were occurring based on country specific interests. Though it may be appropriate in some cases, the report questioned how these additional activities fit into a consortium-wide concern with building a knowledge base focused on a limited number of topics.

The transition to Phase II and the period after saw the termination or long-term suspension of field activities in four of the eight countries in which IEES was active. Programs in Haiti, Liberia, Somalia, and Yemen were suspended because of security and/or political considerations. A six month period of political upheaval in Nepal forced suspension of that program. It was a year and a half before it was resumed. The Zimbabwe program eventually was terminated by mutual agreement after meeting most of its initial limited

objectives. Though IEES was active in eight countries at the beginning of Phase II, only two country programs, Botswana and Indonesia, were effectively carried over from Phase I through to the beginning of this mid-term evaluation. Nepal was reactivated after the beginning of Phase II and a new country, Guinea, was added.

It is obvious from the publication dates that much of the research started in Phase I was carried over into and completed in Phase II. This is particularly true of Indonesia and Botswana, where large bilateral contracts were in place. Because there is little evidence of an attempt to separate Phase I from Phase II in the planning of the overall ten year project, even though the project paper calls for re-bidding of the Technical Assistance (TA) contract after five years, research and services appear to have continued apace. One can only speculate as to what would have been the impact on the project if the original contractor had not been the successful bidder on the Phase II contract. What would have happened to the three large bilaterally-funded Task Orders? The research in process? The programs of the other six resident RTAs?

The basic assumption upon which Phase II is based, as presented in the Project Paper amendment and the new contract, was that efficiency (internal and external) and quality of education systems--in practice meaning schools--can be improved by identifying new budget strategies and policies, improving the management of budget and human resources, and mobilizing nongovernment resources to support schools.

The four strategies to operationalize these assumptions, as stated in the contract with FSU, were as follows:

1. "...improve management capacity and skills..."

2. "...apply new technologies in Education Management Information Systems..."

3. "...conduct original research that yields new or country-specific evidence on how school efficiency and quality can be increased..." and

4. "...limited dissemination activities that mesh with related A.I.D. projects..."

Funding was provided to FSU to "...develop widely applicable tools, methodologies, and lessons related to improving central government policies and local school practices..." to boost both internal and external efficiency and school quality.

The two most significant changes in the Phase II contract effecting project activities were: (1) a change in emphasis in the type and role of research; and (2) a tightening in the amount of funds available for management of the contract. The latter greatly reduced or eliminated funds available for participation of the three active consortia members in collaborative management of the project. The practice of holding frequent management meetings was dropped. Funds available for institutional involvement of the subcontractors were reduced, and the mode of participation shifted from one of institutional collaboration to one of contracting for specific services and/or persons. The shift was from an institutional relationship to something approaching a personal services contract relationship.

The assumptions, strategies, and basic purposes of Phase II provides more clarity than that given in the Phase I contract. The description of the work statement in the Phase II contract is likewise more detailed and precise. However, the nature of the effort did not drastically change and, other than the changed emphasis in research noted above, required no change in activities.

There was important continuity between Phase I and Phase II. The Mission-funded task orders were not amended and activities continued unchanged. Research already underway was continued. Work with the EMIS continued unchanged. Work in Nepal had ceased, and by the time it resumed, all new Nepalese officials were in place and changes from Phase I to Phase II were not noticed. Some of the continuity was a result of LDC insistence. USAID/Indonesia informed the evaluation team that the MOE wanted no change in Phase II and insisted on keeping to the original research agenda.

As stated above, the level of project activities had begun to fall by the time this evaluation got underway. The status of major project activities was as follows:

1. The bilaterally funded buy-in project, EPP, in Indonesia had just ended and a final evaluation had been conducted. The only in-country presence was a locally hired administrative assistant. Plans were being prepared to continue to support the decentralization of educational planning to several of the provinces. These activities have since begun using Indonesia professional personnel and U.S. consultants.

2. The RTA in Nepal had about two months left on his contract and it was uncertain whether it would be extended to allow him a full two year assignment in Nepal. (It has since been so extended to April of 1993.) His main activities were to provide technical support to the Statistics and Planning Directorate and to prepare for the final phase of the research project on the causes of the high drop-out and repetition rates in the first grade of elementary school.

3. The RTA in Botswana had one month left in-country and was drawing activities to a close. The research project on teacher incentives was in its final phase and has since terminated. All IEES activities have ceased.

4. Two technical assistance advisors had recently been provided to the Guinea Mission through a buy-in to the IEES core contract. No IEES core funds were being expended in Guinea. The Mission was planning a mid-term evaluation of the project that would include the activities of the technical assistance team.

5. Though the ninth year of the project had already begun, FSU project management was in the process of preparing its "Ninth Year Plan." It was also preparing a number of documents on project experience.

6. Activities have ceased in Liberia, Somalia, Haiti, Yemen, and Zimbabwe.

PHASE II ACTIVITIES

The Phase II contract is quite specific and detailed in its description of activities, priorities, presentation of a scope of work, and specification of deliverables. It has five main headings:

1. Education policy adjustment and planning.
2. Knowledge development.
3. In-country education management.
4. Dissemination.
5. Project management.

Education Policy Adjustment and Planning

The contractor was tasked to develop LDC government's "interest" in identifying policy choices through the conduct of sector assessments and other limited analysis of the education sector. Policy adjustment "maps" were to be formulated for each country, within which policy changes and methods for tracking effects on educational efficiency and quality could be specified. They also were to include feasible steps for implementing agreed upon policies aimed at boosting educational efficiency and quality, as well as indicators of quality and efficiency. IEES field staff raised questions in planning meetings with A.I.D./Washington about the feasibility and usefulness of the maps. The possibility of objections being raised by the host country officials about their content was also a concern. The A.I.D. project manager at that time decided that attempting to develop such maps would not be useful; the requirement was dropped and no maps were prepared. It was unclear whether other means of providing the information was specified.

Much of the project is based on the assumption that a systematic sector assessment followed by decision-making using various econometrically flavored indicators, cost/benefit and efficiency studies, and classroom studies using world class, quantitatively-oriented classroom behavior studies, can lead to rational educational reform. Few would question the idea that the better the information one has, the better the decisions are likely to be. However, in the real world, decisions are affected by many factors other than data on internal and external efficiency, information on classroom practice, and teacher attitudes. Indeed, even models which purport to measure such things are open to interpretation in a social sector such as education. Such rational models must be seen as heuristic devices to encourage looking at options. One informant who was heavily involved in the first phase of the project expressed some concern that the models (paradigms) generated could become dogma, forcing certain kinds of decisions based on the biases and assumptions inherent in the approach itself.

The parallel concern is that such models often end up suggesting ways of solving past problems, rather than anticipating the future and innovating in preparation for it.

The sector assessments, according to several informants who were involved in developing the approach, included little that was new, but the models developed were used across countries and thus produced useful, somewhat comparable data. Further, the studies took the approach that the goal was to assess problems and issues leading to a long-term educational development strategy for the country. Thus, the approach was better than many World Bank sector studies, which often end up with a laundry list of projects to be funded rather than an integrated educational development strategy.

The same approach to sector assessment was used in all countries involved in the project. The IEES-generated handbook on the conduct of Sector Assessments outlined types of data to be collected. It is not clear, however, that these comparable data were put to any use across countries. As noted above, the second phase of the project was rewritten by A.I.D./Washington to de-emphasize studies across countries and to concentrate only on research within countries.

The original intent of the project was to build on the sector studies and to institutionalize a system within the MOEs of participating countries whereby there would be continuous collection of management information relevant to indicators of efficiency and effectiveness, and continuous analysis of these and other research data leading to a permanent flow of information for decision-making. Although it is clear that there are some statistical data in systems called Management Information Systems, the overall notion that there can be a totally rational process of decision-making based on these data has not been demonstrated. If anything, the systems approach was a driving paradigm which helped hold together the project. However, the acceptance of the paradigm by the participating countries, in anything but rhetoric, except perhaps in the conduct of the sector analyses, needs to be more fully documented by IEES in the final year of the project.

The project has been successful in focusing interest on policy choices in the countries where sector assessments have been conducted. The end-of-project evaluation of the Indonesian EPP project by Harold Freeman indicates that there has been considerable impact on planning and policy deliberations.

Likewise, the buy-in for the Botswana Junior Secondary Education Improvement Project (JSEIP) led to far-reaching and perhaps lasting changes in the education system. These included curriculum reform and extension of basic education to grade nine. The Botswana Mission is planning to conduct a final evaluation of this project, which will document the impact of the buy-in activity as well as the IEES activities on the education sector in Botswana.

It is evident that wherever a sector assessment was conducted, the country's attention has been focused on policy choices. This was insured by the involvement of host country personnel in the conduct of the study and broad participation in the consideration of the sector assessment findings. In some countries this resulted in the design of donor-funded projects,

some of which resulted in buy-ins to the IEES contract. In several countries, the document itself has been an important reference for the government and donors alike.

In Botswana, it was found that after the closing of the large bilaterally funded JSEP project, the residual IEES presence in the form of the RTA was having only marginal effects on policy and planning, and this mostly through the supply of information requested by MOE senior officials. The same situation existed in Nepal. Both RTAs had effectively created niches for themselves within the MOE. It was through their personal status and relationships that they found themselves in a position to be directly called upon for assistance by people of influence within the Ministry. This, however, represented only marginal participation in the policymaking and planning process.

In March, the Guinea Mission conducted a mid-term evaluation of the bilateral education project to which IEES supplies technical assistance. This mid-term evaluation will be able to supply valuable input to an eventual summative evaluation of the IEES project.

Though the project was active in Liberia, Yemen, Haiti, and Somalia in the early part of Phase II, activities have since ceased. Further, lack of access to these countries makes it impossible for the team to draw conclusions concerning the project's contribution to their policy and planning activities. For the basic objectives of the centrally-funded IEES activities, the choices of these countries, because of their political instability, was unfortunate.

The intent of the project is to eventually have an impact upon the educational systems of countries other than those directly assisted by the project. Any such impact would be impossible to measure at this time. However, the planning and policy analysis tools of the project have been shared with others and presentations have been made at conferences of practitioners from many countries. It is probably unreasonable to expect, however, to try to measure their overall impact on the efficiency and quality of school systems in the developing world. In the opinion of the evaluation team, the most direct impact on policy and planning has been in individual countries through the conduct of the sector assessments and the consideration of their findings.

Knowledge Development

One difficulty in examining "knowledge development" is the definition of what, within the project, consists of such activity. Although there were specific activities called "research" and a number of publications in the IEES publications catalogue are so listed, the Sector Assessments, descriptive reports, and many other documents issued locally or made available internationally would seem to have contributed to "knowledge development." We will, therefore, look at knowledge development and dissemination rather broadly.

The history and context of the IEES project suggest that it came about as a successor to a number of A.I.D. initiatives and was expected to relate to other locally-funded A.I.D. activities as it progressed. For instance, for a number of years, A.I.D. had supported projects designed to prove that various technologies (radio, computers, television, citizen communication, etc.) could help improve education. This concept included the idea that a

kind of engineering systems approach could be applied to solving educational problems. Although the systems approach was originally used as a concept for the planning of instructional packages and systems, the notion was broadened to include sector analysis and resource planning and utilization within an education system. It would seem that the IEES project can be considered a project which both adds credence to the belief that a systems approach to solving education problems to some degree is useful, and at the same time, raises serious questions as to the degree of its usefulness as a driving paradigm for educational reform programs and projects.

Clearly each country program started with a Sector Assessment which attempted to use a systems approach to the study of problems and issues in the educational system. This was to be followed by a programmatic effort to study problems and issues raised in the sector study. Priority for problem/issue resolution was established by the local authorities and the IEES team members in each country. Parallel to this was an effort to establish a computerized management information system for the storage and manipulation of quantitative data relating to the system, presumably so that efficiency and effectiveness studies would have data with which to work.

There is some indication that some of the research efforts indeed did flow from the sector assessments, though this is difficult to document. Several of the research reports have reasonably good synthesis chapters which suggest policy, program, or project ideas based on the result of the research. For the most part, however, the studies themselves suggest that the phenomena are too complex to suggest firm policy decisions. Essentially, there appeared to be a systematic approach to sector assessments but the research side of the effort was not as systematic and continuous in terms of linking the studies to policy issues stemming from the sector studies. In Botswana, of course, there appeared to be much focus on classroom observation and teacher interview studies, and this focus provided some continuity. In Indonesia, there was emphasis on various efficiency studies, though the actual impact of these on policy is hard to determine.

Contractual Research Specifications

In the first phase of the project (1983-1988), research (other than Sector Assessments which are, themselves, a type of research) was given a supportive role. The project contract (15/20/83, p. 17) suggests that one project output will be "research and development support - investigation of problems in education; specific studies which relate to the development of educational plans or projects and their implementation; pilot projects which test innovative solutions."

These goals were substantially modified in the second phase of the project (1989-1994). Under Activity 2 of the contract extension (7/11/89, p. C-3) it is specified that: "...Two research topics are of high priority...: (a) The quality of teaching and teachers, including research into teacher motivation and retention, pedagogical practices, utilization of instructional materials and new technologies, and cost-effective methods of teacher training...; and (b) The mobilization of non-central government resources for basic education, including

central government incentives for private schooling, local encouragement of community self-help and more equitable pricing policies at secondary and tertiary levels."

Such research was to be directly related to policy options in each country. Under Phase II, shorter-term analytic activities related to the improvement of educational efficiency and quality in each country would be allowed, but these activities should generally be done by local researchers. Such knowledge generation activities were to receive about 20 percent of direct cost resources with "higher priority placed on formal research and less priority placed on short-term analytic work. Knowledge development also includes internal assessment of the relative costs and impacts of the project's different activities." In provision C.2.8, the contractor is directed to conduct an ongoing evaluation of project activities and impacts which will "(1) develop a sustainable method and tools for tracking progress in improving educational efficiency, and (2) assessment of the effectiveness of educational policy adjustments and impacts at the school level" (p. C-7).

In Phase II, dissemination activities were to be "limited" and linked to management under Activity 4: Dissemination and Project Management. The contractor is directed to disseminate products of Phase I in cooperation with other A.I.D. projects (including Learning Technologies, Radio Learning, Clearinghouse for Development Communications, the Basic Research in Developing Education Systems [BRIDGES] projects) and with "a new dissemination and field support project [to begin] in FY 89" (p. C-4). The evaluation team can find little evidence that such cooperation existed. The various projects were loosely linked by virtue of some overlap of consultants and implementing organizations. Though several coordinating meetings were convened, there is no evidence that IEES products were distributed as a result.

The contract further specified that "Short-term studies and empirical findings from long-term research may be published with the CTO's approval. However, the contractor shall rely heavily on professional and academic journals to communicate findings from analytic activities" (p. C-10). One product was to be a plan "for implementing at least three cooperative dissemination activities with related A.I.D. projects..." (p. C-I0) and at least three international or regional conferences were to be held.

Research Themes by Country

It appears that the project followed these guidelines in a general way in each country. However, there is not a dramatic shift in type of research from Phase I to Phase II, at least in Botswana. Botswana studies since 1987 concentrated on what is happening in the classroom with the idea of identifying what could be done to motivate teachers and to link such motivation to increased learning by students. One such study, based on observations of junior secondary classroom teachers in 1988, suggested that more teacher training does not necessarily lead to greater student achievement, though classroom behavior of trained teachers significantly differs from the behavior of lesser-trained teachers (Snyder, Chapman and Fuller, December 1991). At the same time, under-trained teachers give more time to lesson preparation and to individual student progress than trained teachers.

Another Botswana study examined teacher incentives in the context of experience worldwide (Chapman, Snyder, and Burchfield, December 1991). Based on classroom observations and questionnaires of some 549 junior secondary teachers in June 1989, the researchers concluded that things could be done to improve the satisfaction of teachers but that teacher satisfaction did not necessarily mean change in classroom behavior. Such change might imply a much more complex work life, and teachers would likely resist any major innovation which would change classroom practice. Yet another publication (Fuller, Snyder, Chapman, and Hua) reports on observations of some 310 junior secondary teachers (244 in the final sample) in June 1989, in this case to explore factors which seem to relate to teaching behavior. Three results are reported: first, teacher's behavior "is simple, involves few instructional tools, and is teacher centered ..;" second, "teacher routines are consistent over time ..;" and third, "the most amount of variation ... is explained by organizational rules and inputs ... Differences among teachers [ethnic background, gender, local, or expatriate] only occasionally help to explain behavior variation" (p. 11).

Snyder, Chapman, and Fuller report in a December 1991, publication, *Classroom Research in Botswana,* on classroom observations of 212 teachers in 34 junior secondary schools in 1988 (during Phase I of the project) and concluded that there is not much indication that children taught under trained teachers achieve more than those under un-trained teachers, though the trained teachers demonstrated somewhat different classroom behavior. Another element of this earlier junior secondary study examines "flow" in the classroom and finds that "few classrooms in Botswana flow; some are affectively flat, and the majority are marked by low, but excessive complexity. Instead of order in the classroom, there's routine; instead of intellectual skill development, there's memorization; instead of involvement in learning, there's teacher dominance" (p. 34). In these and related studies in Botswana, other factors than teacher training were judged to account for about 75% of differences in achievement between classrooms. One limitation of such studies, of course, is that they focus primarily on results of students on examinations and do not examine other goals of the school and the possible effect of teachers on the achievement of such goals.

The above report on classroom research concludes that such research will help define what needs to be done to reform what happens in the classroom, and that there are problems because the management infrastructure is a "hodgepodge of homegrown and donor assisted units which are understaffed, fractionated, and under considerable pressure to accommodate further expansion and modernization. In other words, the burden is very likely to be borne by local bottom-up strategies, which are unlikely, or interventions by foreign technical assistance projects, which have their own problems." The report concludes that gains from a research program are likely to be "long term, if they accrue at all...This research provides an empirical grounding for the creation and evaluation of continuing program modifications." The authors note that recent collections of educational research focus on "important macro policy issues or outcomes, ignoring educational process and classroom dynamics."

The latest Botswana studies available to the evaluation team continue the interest in teacher incentives (Burchfield, draft report October 1992; a follow-up of the 1991 study by Chapman, Burchfield, and Snyder) and explore headmasters' beliefs and how these might relate to improvement of teacher performance (Chapman and Burchfield, January 1992).

The models used for the Botswana classroom studies are borrowed from a number of authors, mostly those of consultants involved in the project. The consultants, in turn, publish these materials in various locations. There seems to be a seamless web of publications coming out of the research; the same item may be used in an IEES publication and later (perhaps slightly modified) as an article and/or as a book chapter in a book published in the United States or elsewhere, occasionally in Botswana. The body of research thus appears much larger than it actually is.

Taken as a whole, these studies reinforce the notion that teacher performance is a complex issue, and changing this performance is equally complicated. It is even more difficult to prove that specific teacher behaviors and preparation are directly related to student achievement. However, the studies must surely have raised the consciousness of the education establishment in Botswana as to the need to examine the behaviors of teachers and headmasters, as well as their environments, in making future decisions as to how to improve the system.

In the Nepal case, the second phase is much more simple. Apparently, one fairly complex study is underway, in part under contract with a local consulting firm, on family, school, and community factors which appear to contribute to grade repetition and student attrition at the end of the first grade. This is to lead to suggestions as to what can be done to improve the holding power of the school.

In Indonesia, according to the IEES *Plans for Project Year Nine*, only two studies were to be underway in 1992: *The Indonesia School Principal: Broadening Responsibility* (Bill Cummings, Romli Suparman, and I.M. Thoyib) and a literature review by Juliet Chieuw and Nadin Mandolong on decentralization: *Strengthening Local Autonomy*. (Although FSU project staff indicated that these studies are preliminary to larger research studies to follow.) In fact, the first study was published in June 1992, about the time that year nine was to have commenced. This school principal study is the only one of the IEES publications where we could find the notion of relevance mentioned. Several instances are noted where local authorities and schools in the study have taken initiative to add locally relevant components to the curriculum, though the authors lament the fact that many local authorities have not used their authority to deal with issues of locally relevant curriculum.

Quality seems to mean essentially achievement in traditional subjects as demonstrated in examinations (even though the rhetoric in some of the documents is much broader). Although decentralization is encouraged in part from the point of view of bringing the school closer to community needs, there seems to be no research designed to discover what these needs might be and how they might be incorporated into the curriculum.

Other studies completed in year eight of the project seem to be extensive and these are described in pp. 19 - 44 of the IEES report *Plans for Project Year Nine* (July 1992-July 1993). If these were all completed between July 1991 and July 1992, then they have contributed to Phase II of the project.

The major studies completed during the previous year, according the *Plans for Project Year Nine* appear to have been: a *Basic Education Quality Study;* a study of the *Quality and*

Efficiency of Vocational-Technical Education; a study on the *Transition from Education to Employment,* which includes a tracer study of graduates; a study on *Educational Indicators;* a study on the *Improving the Quality of Teacher Education* (which recommends a number of future studies on in-service teacher training, teacher incentives, and pre-service training); and several studies on *Education and the Economy* and related areas. In the *Plans for Project Year Nine* report there are lengthy analytical summaries of work completed in the above areas, but it is not clear what the IEES input was in each area, nor is it always clear as to what the product has been in terms of publication and dissemination.

Few of the research studies break new ground in the sense that they discover something that was dramatically different from what is known from experience or through studies in similar contexts. As Vic Cieutat indicated in an interview during this assessment, the contribution of the Sector Assessment manual was to take conventional wisdom on sector assessments and put it into a usable form so that local personnel, working with international personnel, could easily use it. Similarly, most of the other monographs quote the models and earlier work of the authors of the monographs, attempting to apply their earlier models to the contexts of the countries involved in the IEES project. At the same time, to the extent that local researchers and educators were involved in the studies, and to the extent that educators and s read the study reports, the research program had some impact in focusing attention on issues of classroom practice and related matters in Botswana and on internal efficiency in Indonesia.

Impact of Knowledge Development Activities and Processes

The early emphasis on capacity building involving local personnel as needed in each national context was, in the second phase extension, replaced by priorities on research related to popular USAID notions of the moment. Essentially it would appear that A.I.D./Washington wanted data to support the notion that teacher and other forms of education could be "privatized," that improved teaching materials and practices could improve education in each country, and that costs of education could increasingly be passed on to parents, students, and local communities through a variety of strategies. These research priorities seemed to have penetrated Indonesia and, indeed, seem to dominate research interests there to the present time. In Nepal and Botswana, however, local authorities insisted on setting their own priorities, even though they depended largely on outsiders to come in to do the research for them.

The situation was complicated by the change in emphasis from capacity building during the first phase to the notion of world class research in the second phase. The evaluation team feels that the change of research and development emphasis midway in the project (and the cutting of funds to permit planning meetings between the research team and the prime contractor) was counterproductive. Further, if the objectives of the original project were to experiment with and to demonstrate a long-term systematic approach to sector assessment and follow-through that was grounded in the needs of each country, it was hardly appropriate in the second phase to abruptly change key elements of the strategy. Fortunately or unfortunately, one might add, the changes appear to have had little effect in practice, except

that administrative funds were eliminated from the project thus prohibiting management meetings among the key professionals at the stateside consortium institutions. This led to some sense of non-engagement in the second phase on the part of consultants based in Albany, New York.

On the Indonesia portion of the project, there is virtually no distinction between the EPP, a buy-in, and the IEES. A research report entitled *The Indonesian School Principal: Broadening Responsibility* (June 1992) by Cummings, Suparman, and Thoyib, has EPP as the major heading on its cover along with IEES. Accordingly, it is difficult to desegregate what aspects of "knowledge development" can be attributed to which project in Indonesia. From a conceptual point of view, of course, it matters little and one can make the case (a good one, in fact) that it is one of the successes of IEES that a local buy-in permitted a seamless integration between the IEES, a global project, and local initiatives related to the global project.

In terms of "research" as specified in the second phase contract, it appears that to the extent it was funded by core funds, it happened primarily in Botswana and Nepal; most of the research published in Indonesia was done under the EPP project heading. In Nepal, the research was generally contracted out to a local consulting firm. In Botswana, although a local consulting firm seems to have been involved in one project, research was generally done by consultants identified with one of the consortium institutions involved in the IEES contract with the help of local informants and helpers, including faculty and students at the University of Botswana.

In Indonesia, one of the countries most deeply involved in the project, the intent was to strengthen the research and development office in the MOE and to extend such infrastructure to the provinces. Some informants, however, suggest that, to some extent at least, the project took the "star system" approach and was guided by three strong individuals in the MOE who established the research agenda. This agenda seemed to some observers to follow their interests rather than issues generated by a research and management information staff at headquarters or in the provinces. Such research, at the very least, appears to have been largely used by MOE officials at the national level and there is little evidence that much has trickled down to provincial levels. The processes developed have been carried down to the lower levels of the system. Five provinces are participating in a pilot project designed to standardize the collection of statistics and to do provincial planning along the lines of the national model. Two of these three stars have moved on to other endeavors, and the future of the infrastructure established under the project is in doubt.

Internal and External Efficiency

In the sector studies in each country, there was attention to matters of internal and external efficiency of the education sector. Following the sector studies, only Indonesia gave emphasis to such matters in both phases of the project. Internal efficiency studies focused on how to do a similar or better educational job with less funds; the external efficiency measures were generally concerned with the relationship of the education system to the job market.

Internal efficiency studies in the project concentrated on repetition, dropout rates, quality of learning (school related variables including facilities, teaching materials, quality of teacher preparation; home related variables including interest, education and economic status of parents, health of student); and finance and administration (possibility of using funds more efficiently and of transferring more costs to the parents and the local communities). External efficiency measures studies tended to concentrate on employment and earnings differentials among different levels of graduates and non-school attendees.

The notions of internal efficiency are those of conventional wisdom in economics of education circles. It is, of course, common sense that certain interventions such as better (and more available) teaching materials will improve internal efficiency. It is equally common sense that if the parents and local communities pick up more of the costs of education, then the national government appears to be managing a more efficient (in terms of cost to the national government) educational system. Similarly, if students progress from grade to grade without dropping out or repeating, the per-student cost per graduate is likely to be less than if there are high dropout or repeater rates.

At best, the project succeeded in attracting the attention of policymakers in each participant country to these kinds of issues, mainly through sector assessments and related policy studies. Changes probably did indeed occur in policies affecting these issues. Whether or not the project dramatically improved the internal efficiency of education is an open question. The evaluation team found little evidence of such an effect when in the field, but these data are too limited to make excessive claims one way or the other.

The models which summarize indicators of educational quality are extremely detailed and complex. They appear primarily in such documents as the McMahon, Boediono, and Adams EPP volume, *Improving the Quality and Internal Efficiency of Education* and in Douglas M. Windham's *Indicators of Educational Effectiveness and Efficiency*. Windham identifies three levels of development for systems of education indicators. It appeared that the two EMIS systems visited have barely reached level one. This should not be taken as a criticism as it is unlikely that one could find a system in the U.S. that has reached level three. In any event, the choice of indicators is more apt to be country specific, based not just on needs for planning and policymaking but also on availability and validity of data and other "political" considerations. The evaluation team wonders if the complexity is not beyond the practical interests of most MOEs and of most school administrators.

The EMIS, in fact, seem to be in large part rather simplified sets of indicators, perhaps closer to what would be considered basic statistics on enrollments, numbers of schools, teachers, etc. These basic statistics may be of some use in macro planning but are probably not of much use in micro planning or research on classroom practice, supervision, and management.

Essentially, if too much reliance is placed on indicator studies, the overall policy sense of where the education system should go may be lost. On the other hand, some level of concrete information is needed on which to base decisions. The question is how to achieve balance and how to assure that those who manipulate the data do not at the same time manipulate the decisions to suit their biases and ideologies.

On the external efficiency side, as noted above, there was little work in Botswana; in Indonesia, attention seems to have been directed almost exclusively on the impact of education on employment and income generation. A June 1992, volume of articles edited by Walter W. McMahon and Boediono on *Education and the Economy: The External Efficiency of Education,* issued by the EPP illustrates this limitation. External inefficiency is defined in the overview (p. 1) as "a poor match between both school and college graduates and the changing needs and changing technologies of job markets. It includes the inefficiency that arises when there are too few graduates at one level, and too many at some other level, as well as too little (or too much) human resource development overall." Parents, children, and governments are, indeed, concerned about these issues, but concentration on economic and labor market issues alone can overlook many other goals of the education system and its constituents. Increasingly, parents are disillusioned concerning the role of education in preparing young people for salaried jobs in the modern sector, jobs that are far too few when compared to jobs for graduates of secondary schools and even universities in many countries. Enrollments are falling in some countries at all levels, and the education establishment may have to redefine its role as broader than preparation for employment. Relevance, a term often denigrated as referring to second class education for rural people, may again need careful attention in terms of preparing young people to improve the rural and traditional environment which makes up most of the economy in many developing nations. Can there really be too much human resource development, as implied by the McMahon/Boediano document, or is there just too much of less-than-fully-relevant education?

The IEES work on decentralization in Indonesia does mention that some local schools are wrestling with the issue of relevance. There is virtually no attention, however, in the original project design, the contract between USAID and FSU, or in the research activities to humanistic and ethical elements of education. Focus was on examining how education systems can do a better and more efficient job of teaching academic subjects necessary for timely progression up a traditional academic ladder and to how educational investment can be manipulated to produce enough graduates for employment demands in the modern sector.

Several informants indicated that the sector assessments were better done than the research projects. There is also some indication that the assessments and the research projects tended to use the same people over and over again, thus creating a kind of in-grown perpetuation of one intellectual approach that may have limited the horizon of such a major effort.

There appears to have been much related educational research done in Botswana and Indonesia which is not supported by IEES. Additionally, the impact of the IEES research on other research efforts and/or its relationship to it, is not easy to trace. A May 1992, document issued by the MOE in Botswana, *The Development of Educational Policy, Planning and Research in Botswana* by Shirley Burchfield, lists the following institutions as being involved in educational research: the MOE Planning Unit; the Department of Curriculum Development and Evaluation (and three units under this Department); the Department of Secondary Education; the Department of Teacher Education; the University of Botswana; and the Botswana Educational Research Association. Appended to that study is a bibliography of research studies of over 100 items, most of which are not IEES publications, but many of which may have been influenced by IEES activities. It is difficult if not impossible to judge

the impact of any these studies (including the IEES ones) on educational practice, effectiveness, efficiency, or quality, but the quantity of publications would suggest that Botswana is one of the more researched countries in Africa.

A summary of educational research findings over the past years has been prepared by the project in Botswana, and when published, will be distributed in an edition of 2,000 copies to teacher training institutions, school administrators, and schools.

Clearly, the published reports of the project suggest that the ideal of a systematic project with pieces that flow from an overall conceptual design is hard to achieve. National contexts are not as easy to systematize as academic models, and the problems and issues faced by educators and policymakers in each country do not follow a preconceived pattern. The documents seem to produce evidence that suggests that a project such as this may produce material which academics can combine into a scholarly treatise, but that lessons useful by educational developers may be fragmentary and disjointed even within the most systematic of efforts (see Annex A, *Paradigmatic Concerns*).

Dissemination

In the first phase of the project, dissemination was done through publications, a series of international conferences which included participants from IEES and other selected countries, and in-country "clearinghouses." As the activities are winding down in the second phase, less emphasis is placed on conferences. In any case, it is difficult to assess the impact of conferences, and we will concentrate on the dissemination of visible products of research, essentially the publications.

So far, the knowledge generated by both phases of the project can be found in many disparate publications. Some have been issued by the project in each country, some published in book or monograph form commercially in each country and in the United States, some by IEES at FSU, some in conference documents, and some in professional journals. In the second phase of the project, much of the research product is published in the United States in one form or another, apparently with the goal of informing the scholarly community in the U.S. rather than in the countries where the research was done. There is considerable overlap; a publication issued in Botswana may surface (slightly rewritten) as an article in a journal and as a book chapter. There is no one source of information on the total published product of the project, or of research that may be related to the project but not necessarily supported by the project.

There is, of course, a list of publications of the project, essentially those items produced by and available from FSU. See Annex B for the complete list and Annex C for dissemination figures as of summer 1992 of each item. Eleven research reports are listed as having been produced by the project through mid-1992, 5 of these at least published during Phase II, though only 2 were actually begun during that phase. These are a mixed bag and deal with such diverse topics as management information systems; strengthening the local capacity; teacher nationality and classroom practice in the Republic of Yemen; and classroom practice in Botswana.

Seven items are listed as training materials produced under the project. These include a manual for microcomputer applications for education, policy workshop training manuals, and a game on educational innovations. Country-based documents include 13 relating to Botswana; 3 to Ghana; 10 to Haiti (one item was 4 volumes); 29 relating to Indonesia; 4 to Liberia; 1 to Malawi; 1 to Namibia; 7 to Nepal; 1 to Senegal; 8 to Somalia; and 5 to Yemen.

Finally, by mid-1992, the project produced 6 project planning documents (some quite extensive); 9 progress reports, including a final report for Phase I; 5 project descriptions and evaluation summaries; 21 field papers (brief outlines, guides, or summaries produced by consultants); and five other research reports not otherwise classified.

It is difficult within a short evaluation exercise to judge the quality and usefulness of this mountain of paper. Even the nine-part scheme used by the project for categorizing the documents in Annex B raises questions as to whether or not the project itself has a clear notion of how the printed material fits together into a whole.

For the most part, the major publications (even sector studies) were available only in English. Although earlier evaluations of the project suggested greater use of translations to permit wider use of publications locally (especially in Nepal, Indonesia, and other countries where English is not widespread at regional and lo[illegible]l levels), Phase II of the project did not use local languages at all in dissemination efforts, except for documents prepared in Indonesia as part of the EPP buy-in, a number of which were issued in Bahasa Indonesian.

In the second phase of the project, as described in the contract extension, because of its stated desire for higher quality research, A.I.D. implies dissatisfaction with the publications of the first phase. The document imposes an approval process on the contractor for each publication (other than articles in professional journals) and talks of "limited dissemination." We would raise questions as to the advisability of A.I.D. attempting to control research and dissemination activities in such projects through such restrictions. Further, in a project which will have spent (including buy-ins in each country) as much as 60 million dollars, one would have thought that massive dissemination of findings would have been sought by A.I.D. We suggest that the entire dissemination effort of such projects be reviewed and reconsidered by A.I.D., perhaps in the context of the several projects on the books which purport to be involved in some way in knowledge creation, information collection, analysis, and dissemination. Initial discussions with the Academy for Educational Development (AED) concerning the possibility of the Advancing Basic Education and Literacy project (ABEL) taking on the task of disseminating the results of the IEES project should be pursued.

As noted above, in the second phase of the project, emphasis is placed on dissemination of project findings through professional journals and associations. Fragmented information can be disseminated in this fashion, but if the project was to be a systematic, integrated, long-term program, the reporting and dissemination of findings should also be systematic and long-term. Further, not all countries involved in the project have a well developed network of associations and professional journals.

If the idea is to disseminate through professional journals and associations in the United States, the idea is equally limited. Only a limited number of papers can be presented in any

professional meeting, and there are many professional associations where something related to the project might be presented. This is, however, a poor way to systematically disseminate results of a major ten-year project. Such dissemination should be encouraged, but only as a supplement to more systematic efforts.

There are several summary documents which combine articles of a number of consultants and local authors in an attempt to articulate what has been learned throughout this long and complex project. These tend to be anthologies, and there is little connection between the several which exist. Some have been published by the project; others have been published by governments involved in the project; and still others have been published by commercial presses either within each country or elsewhere. There is really no publication or series of publications which attempts to synthesize what has been learned in a way to make the whole more than the sum of the parts.

There appear, however, to be four such synthesis efforts currently in preparation: one will be a volume summarizing project experiences; a second volume will examine the IEES system approach; a three-volume series will examine what has been learned about the systems approach and EMIS (a related volume was done in cooperation with UNESCO's International Institute for Educational Planning on how improved information management capacity can influence educational practice at the classroom level); and a fourth effort will be more reflective and will attempt to do a retrospective on what has been learned concerning the limitations and strengths of efficiency/effectiveness, systems design models/paradigms in the course of the project.

We applaud this effort to summarize project experience during the final phase. We recommend that much of the project's attention be focused on this, and that the reports be more than collections of essays by those involved in the project. A conceptual framework that holds the synthesis together is necessary, and a strong editor must be in charge of the effort. This final effort must also include an awareness of the dozens, if not hundreds, of local publications and research efforts which seem to be related to research themes within the project. These studies are noted as bibliographies in a number of IEES publications or documents (including the May 1992, report by Shirley Burchfield on *The Development of Educational Policy, Planning and Research in Botswana*, mentioned above, which includes an annex by a local scholar summarizing recent studies; also, several of the Indonesian publications have bibliographies listing numerous non-IEES studies related to IEES interests).

The lists of project documents (Annexes B and C) include 6 monographs from Phase I which formed the intellectual framework for the project. These were volumes which took a systematic approach to the analysis of educational efficiency and which outlined approaches to the conduct of sector assessments. A summary volume on developing educational information systems was issued in 1992, and volumes will appear in late 1992 or early 1993 summarizing the experience of Phases I and II of the project in improving educational quality.

Annex C gives the distribution figures for the publications as of mid-1992. Except for the Sector Assessment manuals and the publications on indicators of educational effectiveness (distributed in the 500-600 range), most publications were distributed in the double digit

range or, at best, the low 100 range. Sector assessment manuals often received distribution in the 200-copy range.

These figures may not include duplication of some items by universities or other organizations for further dissemination. For instance, at least one university has duplicated copies of the training manuals for local use; this duplication would not appear on the centralized distribution tally. In addition, this list does not include articles and other non-project publications prepared by the project staff and consultants. Even including these documents, however, one can only wonder if there should not have been more emphasis in the project plan on dissemination of publications.

Some informants indicated that there was some ambiguity as to who was to send what to whom in terms of publications. Although FSU sent a number of publications to Washington, it is not clear what was done with them after they arrived. It is similarly not clear as to what publications went to what A.I.D. field missions and who decided on these matters. Clearly, dissemination was not a primary concern of the project, either from a contractual or contract management point of view.

At the time of the evaluation, the project was doing abstracts of all publications and studies with the idea of entering the material into the ERIC system. This will help establish something of a memory. In addition, AED has indicated that it intends to disseminate relevant information concerning the project through the ABEL project. In ABEL, there is a quarterly newsletter, *Forum*, which goes to a list of 3,000, and which is a compilation of information from six centrally-funded projects. The newsletter is received by MOEs, USAID Missions, educational policy support personnel in the various countries, and U.S. researchers interested in development education.

In addition, ABEL issues an *Information Bulletin* which is more than a summary of research projects, but rather a synthesis of lessons learned. A third dissemination technique involves literature reviews concentrating in areas such as the economic and social impacts of primary education in developing countries. Finally, occasional papers are issued--each perhaps 25 pages on a critical issue in primary education--and occasional videos are produced. The project is experimenting with ways to identify audience needs; so far it is supply rather than demand driven, although Missions are regularly asked for information and ideas. A database interface dubbed SHARE seems to be an elegant, easy-to-use shell which can be distributed to anyone with a personal computer, and documents and abstracts can then be distributed on floppy disks at modest cost.

During the final months of the project, priority should be given to discussions between ABEL and FSU IEES staff for the purpose of defining concrete ways of feeding IEES products into the ABEL system.

In-country Education Management

One of the goals of the project was to improve educational management at all levels, from ministerial to the elementary classroom. To this end the project developed EMIS and provided advice on how information and research can lead to appropriate policy choices. On--the-job training was to be an integral part of the in-country activities. In addition, special programs were set up for particular groups and a limited amount of U.S. training was funded. The Indonesia project for example, which admittedly had the largest EMIS effort, reports to have provided 680,160 person-days of in-country training in EMIS. The EMIS were to include the standard educational statistics as well as "cost information," indicators of the "education process" such as teacher behavior, classroom structure, student motivation, output indicators of student attainment, and achievement of equity effects.

In Indonesia, as in other IEES countries, EMIS development is a core element of the project and has resulted in the establishment of an educational database at the Center for Informatics. Computer applications to meet policy and planning requirements and for the training of personnel have been developed. The information network has been expanded to include 5 provinces on a trial basis. Data and policy studies have been provided to decisionmakers. Though covering a huge education system, the database included only information from level one of the three stages of increasing sophistication as described by Windham.

Freeman concludes with the observation that "EPP has made a real contribution in... developing a strong data production and analysis capability within Balitbang [the Office of Educational and Cultural Research and Development in the Ministry of Education] and a management information system which eventually will be integrated across Ministry of Education and Culture (MOEC) departments and extend to all the provinces and districts of Indonesia."

The EMIS activities in Indonesia were part of a larger $14 million bilaterally-funded activity. Only funds for technical assistance were put into the IEES contract through buy-ins. Outside the IEES project, the USAID Mission provided over $2 million worth of hardware and funded 5 Ph.D., 6 M.A./M.S. degrees, and 57 person-months of study tours. Exactly what percentage of this training was in the use of Management Information Systems and what was in Policy Analysis/Research is unclear.

Freeman reports that the EMIS serves as one of the main sources for educational data and it is currently being used to inform policy, planning, formulation of budgets, manpower development, school mapping, and the provision of educational statistics. Freeman also reports that as of July 1992, the end of the EPP project that, "although the development of an integrated EMIS in the MOEC has not yet been fully achieved, computer facilities have been utilized by various units of the Ministry and also related outside agencies."

An early experiment to establish 3 EMIS units at the provincial level was expanded to 5 units and is now being expanded further. An unintended result of the quick adoption of the concept of using hard reliable data for planning and reporting from the provinces seems to be

a growing impetus for decentralization on the part of some, but by no means all, elements of the education establishment.

In Nepal, there seemed to be minimal evidence of impact on overall education management per se. Here, also, the centerpiece of the IEES activity in management improvement is the EMIS. It appeared to be primarily an automated means of storing the same range of statistics previously collected and recorded on paper. It contained no cost information and had not yet reached the first level of indicators as specified in Windham's publication concerning educational indicators.

The information could be accessed faster, but the system contained nothing more than it had before the EMIS system had been introduced. The RTA was a resource much appreciated by high level ministry officials. Using the EMIS, he could answer questions and supply statistical information in a shorter time frame. However, on his departure, the statistical unit is likely to return to its previous state. Though several ministry personnel have been trained, they do not stay long. Unless another donor provides technical assistance and some material support after the departure of the RTA, the prognosis for the system is bleak. A discussion with the head of a large IBRD-funded semi-autonomous basic education project just getting under way indicated that it will in all likelihood set up its own EMIS. This will further threaten the sustainability of the unit within the Ministry with which IEES has been working.

The statistical unit the RTA worked with in Botswana was actually a part of the Ministry of Finance, though located in the MOE building. The career tracks of the staff are controlled by the Ministry of Finance, not the MOE. Staff turnover is high, and when people leave for training, personnel policy dictates that their positions cannot be filled. When the team visited Botswana, the unit staff was at half strength, two of four, and not likely to improve. The acting head of the planning unit told the evaluation team that he was expecting to go on training soon. This would leave a professional staff of one. As with Nepal, it is difficult to conceive that the EMIS unit will continue to function after the departure of the RTA unless another donor supplies full time technical assistance and material support.

The Botswana MOE EMIS is further handicapped by the fact that 6 different departments have their own EMIS systems. For example, 3 different systems sent questionnaires seeking information from the same teachers. The system as presented to the evaluation team contains only basic statistics on student, teacher counts, number of schools, etc; however, the validity of the information is untested.

The Botswana MOE much appreciated the work of the RTA and is sold on the need for information to inform policy decision making and planning. The MOE plans to create a planning and research unit that will include the EMIS. They are convinced of the need for an EMIS but emphasized to the evaluation team that it must be one that can be maintained by their staff. The latter was evident when the Deputy Permanent Secretary diplomatically indicated that the Ministry had become too dependent upon the RTA and thought it was time for the Ministry to rely on its own resources. That is not an encouraging prospect given the staffing situation in the Statistical Unit.

In general the MOEs in Botswana and Nepal are convinced of the need for information that an effective EMIS can provide, and of the usefulness of policy-oriented research. Both governments intend to establish research units in their MOEs. Though convinced of the need for research, the Permanent Secretary stated he would ask for more practical research than has been carried out in the past. He wanted research that could provide answers to specific questions and provided solutions to specific problems. He made a distinction between the research a university does and what he felt he needed. The MOE in Nepal was trying to decide whether their research unit should actually conduct research or become a unit that "contracts" for research to be conducted by consulting firms and the University.

Both governments appreciate the automated EMIS systems installed by the project. Both fear that they cannot keep the systems functioning on the departure of the RTAs. In both cases, donor support will be required for some time to keep the systems functioning. The system being install in Guinea is not sufficiently advanced for comment at this time.

Project Management

The Phase I contract contained a separate section stating objectives and a budget for centrally-funded activities. There was a section describing buy-in procedures that postponed fixing objectives and a budget for buy-ins. By contrast, the Phase II contract has one section containing objectives and a budget that encompasses both buy-ins and centrally-funded activities. Regardless, the contract stated that central funds should not be used to meet objectives of Mission-funded bilateral activities. In practice, it is clear that the expenditure of bilateral funds was documented separately. However, in some cases buy-ins were executed after an Operating Year Budget (OYB) transfer of funds from a bilateral source to R&D's budget was made. These funds lose their identity as bilateral funds as they are added to the IEES contract as core funds. Hence, they cannot be reported on separately.

Accounting for buy-in funds separately does not mean that bilateral funds were not used to contribute to core contract objectives and vice versa. However, this would not seem to be a problem as long as the objectives were completely congruent, as they were in Indonesia. The bilaterally-funded activities in Botswana had an overall set of objectives that was consistent with the core contract, though the specific curriculum development activities fit less well. One can argue that where the products of the buy-ins satisfied the requirements of the core project it was natural and proper to use them to meet core IEES contract requirements. This is what the contractor did. In theory, one can separate the funding sources used for meeting core project requirements after expenditures were made, and in fact this is the way IEES project management allocated expenditures to particular countries and project categories. Nonetheless, using bilaterally-funded outputs to satisfy IEES core objectives seems to be contrary to what the contract intended, as indicated by the wording of both the Phase I and Phase II contracts. The evalutation team maintains that this synergy between central and Mission funding is one of the strengths of the project.

By allowing Missions to buy into the IEES project to implement field activities, either through discrete buy-ins or OYB transfer, a wider range of types of education activities became part of IEES. The buy-in activities were not always of a type that made optimum

contribution to IEES objectives. For future projects featuring cross-country comparisons, R&D/ED should consider reversing the buy-in process. That is, R&D/ED could identify projects containing elements that could contribute to R&D/ED project's objectives or ones to which grafting an activity would have the same effect. R&D/ED could then "buy-in" to a field activity. R&D/ED would be initiating the buy-in with its funds, hopefully making a larger number of projects available to efforts to generate cross-national information bases. R&D/ED would be in the position of picking and choosing, rather than taking what buy-ins came along for its purpose. Alternatively, both mechanisms could be incorporated into the project design.

Though the IEES operating mode involves host country officials in the planning and programming of the activities to be carried out in a particular country, the evaluation team was told by MOE officials in Botswana and Nepal that they did not know how much IEES money was being spent on their country nor exactly what it was being spent for. This does not necessarily mean that no collaborative planning of activities took place. It might mean, however, these particular officials were not involved in the planning, or if they were, that they did not understand what the planned activities cost nor what other U.S. expenditures were being allocated to the program in their country. It also might reflect discomfort as a consequence of the way other donors more directly involve MOE officials in the management and the disbursement of funds in their countries. The RTAs knew the budgeted amounts for activities in their particular countries but were likewise unsure of the total expenditure on the programs in their countries.

The IEES project management staff uses the Financial Summary Reports to prepare spreadsheets that report agregate expenditures with the 5 categories of activities on the horizontal and the usual A.I.D. budget categories (salaries, allowances, etc.) on the vertical. The amount of expenditure by category is clear. The expenditures by A.I.D. category are likewise clear. Separate spreadsheets for each country report the amount of core funds spent in or for a particular country. Discrete buy-ins are by definition spent in furtherance of a particular country's program. However, as stated above, bilateral funds added via OYB transfer cannot be reported separately. The contractor has no obligation to do so, even if a system were to be devised.

Comparing the expenditures that can be identified as spent in various countries provides an interesting insight into how widely the magnitude of effort varied country by country in Phase II (see Table l). (NB The variation was similar in Phase I.)

Table I. Expenditure Comparison Across Countries

Country	Buy-In Funds**	Core Funds	TOTAL
Indonesia	$1,832,927	$ 155,444	$1,988,471
Botswana*	$2,458,598	$ 29,108	$2,487,706
Guinea	$ 657,897	$ 11,751	$ 669,648
Haiti	$2,010,897	- 0 -	$2,010,908
Nepal	$ 41,616	$ 41,616	$ 83,232

* In addition much of a $828,054 subcontract with SUNY Albany was spent on the Botswana program.
** Small buy-ins for activities in Senegal, Malawi, Mozambique, and two Regional Bureaus funded activities in the Sahel totaled $165,713.

During the period of the above expenditures, a total of $3,533,250 in central funds was expended. The above identified core expenditures of $237,919 as all of the total that could be specifically linked to a country program.

Table 2 below breaks down the expenditure distribution by Activity Category.

Table 2. Expenditure Comparison by Activity

Activity Category	TOTAL
Policy and Planning	$762,268
Knowledge Development	$651,554
Education Management	$816,642
Dissemination	$692,741

When the same expenditures were broken down by the standard A.I.D. contract categories the distribution was as shown in Table 3.

Table 3. Expenditure Comparison by Standard A.I.D. Contract Categories

Standard A.I.D. Contract Categories	Cost
Total U.S. based personnel costs:	$1,100,426
Central Management, professional	407,099
Central Management, Nonprofession	317,101
Technical Professional (U.S. based)	92,693
Resident Technical Advisors (U.S. based)	66,573
Fringe Benefits	216,960
Consultants	158,026
Overseas allowances	26,348
Travel and Transportation	492,028
Materials, supplies and equipment	52,702
Subcontracts	1,073,619
Other directs	193,639
Overhead	443,703
Total IEES centrally-funded expenditures	**3,540,491**
Total bilaterally-funded expenditures	**7,687,700**
Total Expenditures, July 1989 to October 1992	**$11,228,191**

An allocation of the percentage of the above expenditures made for programs overseas or in direct support of them in the U.S. is difficult, but is done by IEES. The breakdown of expenditures by Activity Category must be, at best, an informed estimation. Even with the budget breakdown, it would be difficult to make judgements as to the relative cost of the various interventions funded by the project. Though the Phase II contract specifies the percentage of project funds that should be spent on each Activity Category, it does not indicate how one could or should separate bilateral from central funds to meet this requirement. This does not seem unreasonable given the diverse nature of the buy-ins. However, it would still seem reasonable to ask the contractor to make its best effort to determine the relative cost effectiveness of the various types of project inputs, bearing in mind that these determinations will be estimates limited by the precision of expenditure allocation data.

The IEES project was designed 9 years ago. Since then, there has been an increased requirement in A.I.D. project planning to link expenditures to project impact. Such links are difficult to establish with this project because of the general nature of the statement on desired impacts and the very complicated accounting resulting from the funding structure.

Project Implementation Monitoring System (PIMS)

The purpose of the PIMS was to provide the IEES staff at all levels with a framework for tracking impacts on educational effectiveness that are related to project inputs. It was based on Windham's monograph on indicators of educational effectiveness and the input/ throughput/output concept. Inputs were those specified in an annual country implementation plan. Process indicators were basically to be descriptions of the interaction of IEES inputs that affect administrative behavior and teacher and student time allocation. Outputs were to include effects on student attainment and achievement, attitudes and behaviors, and equity. (IEES publication *IEES Project Implementation Monitoring System*, June 1991.) The PIMS reports were prepared by the RTAs.

The reports reviewed by the evaluation team were not found to be useful. The section on outputs/impacts contained mostly activities and process indicators and hence did not provide insights into the project's impact on effectiveness and efficiency. The problem probably lies in the unrealistic expectation that the RTAs could identify impacts of the type specified in the instructions. The PIMS were included in the *Plans for Project Year Eight*, but were dropped from the *Plans for Project Year Nine* because the FSU staff likewise did not find them useful.

The need for improved project implementation monitoring by the contractor was pointed out by both the mid-term and the management evaluations conducted just before and after Phase II began. The contractor should review its experience with the PIMS and make recommendations for a more workable system.

Various contractor personnel noted that there was a lack of continuity and consistent guidance provided by the R&D/ED Cognizant Technical Officer (CTO). There have been four A.I.D. project managers thus far in Phase II. Of these, only the present CTO is a career employee with experience managing A.I.D. projects. Contractor personnel further pointed out that the emphasis placed on certain aspects of the project varied over time. Trying to respond to these changes was difficult both for the contractor and the MOEs with which they worked.

Other management issues were:

1. With reduced budget levels in Phase II, the main coordination mechanism utilized by the implementing institutions seems to have been jointly sponsored conferences. More active substantive coordination, as took place in Phase I, would have had synergistic effects.

2. There was a lack of predictability of funding levels. The nature of the field activities required long-range commitments to personnel and country governments. Funding levels were determined by the annual allocation process in

A.I.D./Washington and, in the contractors eyes, were not reliable. When funding levels dropped, commitments made by the contractor still had to be honored, requiring taking funds away from other planned activities.

3. There was little or no monitoring of the field activities by the A.I.D./Washington project managers. This lack of firsthand knowledge of what was taking place in the field was a handicap for all concerned.

Some management issues not relevant to this formative evaluation, but that bear mentioning, relate to the complexity of the project. Two of these are: (1) the optimum number of countries to be included; and (2) tension caused by one contractor which had several clients within A.I.D. in the context of one project: R&D/ED, Regional Bureaus, and several field Missions. Though the total number of countries allowed in the original contract at any one time was 14, the number worked in never rose above 8 during Phase I. This was felt to be excessive and the Phase II contract limited the number of countries where RTAs could be stationed to 4, and the number in which research could be conducted to 3. In its final report, FSU should address these issues and make a recommendation based on its experience.

It is a fact that the contractor had to relate to many people in implementing this very complicated project. This may be just a characteristic of projects such as IEES. With A.I.D.'s increased emphasis on accountability, improved project monitoring, and impact evaluation, one can hardly expect the various A.I.D. managers responsible for the diverse sources of A.I.D. funding to become any less involved in monitoring project progress and tracking the project funds for which they are responsible.

CROSSCUTTING CONCERNS

Cost-sharing

There were two aspects of cost-sharing utilized by the participating countries. The bilateral activities required host country contributions, which were usually "in kind." The Indonesia project had an A.I.D. loan component which was, by virtue of it being a loan to the government, in a real sense a host country contribution; they will eventually have to pay it back. Host country contributions to the non-bilateral activities were "in kind" and most commonly consisted of office facilities and secretarial services.

Buy-ins

The buy-in components to this project were anticipated in the project design and exceeded $30 million. There was a process for tracking expenditures of the buy-ins. Although the buy-ins specified objectives and contained their own work plans, the structure of the project made it difficult in some cases to determine to what degree which source of funds was actually responsible for specific project outputs.

The buy-ins definitely have had a positive impact on the project. They complemented the R&D/ED-funded portion and enhanced the overall effect of the project. The overall objectives of the project were not modified to accommodate the objectives of the buy-ins, though the activities carried out in the buy-ins were not always those that the R&D/ED project would have carried out with its own funds. However, the magnitude of the impact of the project was dependent upon the rather large resources invested through the buy-ins.

Sustainability

Sustainability is addressed in the project through its emphasis, especially in the buy-ins, on institution building and capacity expansion. There has been verifiable progress on institutionalization in some countries. In others, the evidence is less clear. The core project included little that would require the host governments to increase its commitments to long-term recurrent costs. Therefore, cost is not a major sustainability issue, but staffing is. In all countries there have been losses of trained personnel because of the unique skills taught by the project. Training will therefore have to be a continuing emphasis.

Women in Development

Gender issues were discussed in the project paper in the context of access to schooling. In all countries, this was a concern and data in all the information systems was desegregated by gender.

Peer Review

See section on recommendations.

Dissemination

See sections on recommendations and dissemination.

CONCLUSIONS

Acceptance of Sector Assessments in Development Planning

The IEES project has been a factor in helping to gain acceptance and spreading the use of sector assessments in development planning. Twenty years ago, A.I.D.-funded sector assessments were rare. One A.I.D.-funded assessment had been conducted in Korea. In 1972, an assessment involving 81 professionals lasting 10 months was conducted in Ethiopia. A.I.D. sponsored one in El Salvador 2 years later that took 3 years to complete. The concept of what constitutes a sector assessment has changed and continues to change. Using the guidelines developed by IEES from their experience, an A.I.D. assessment now typically requires a team of 4 or 5 persons, 2 to 3 months to complete. The idea that a sector assessment is an essential first step to planning an assistance program to any sector is now generally accepted.

The belief that research, policy studies, and other analyses are needed to inform policy formulation and planning has also been furthered by the project. Evidence of this was found in Nepal and Botswana, where the MOEs plan to set up their own research/analysis/planning units. Indeed, in both Nepal and Botswana the units to be created combine planning and research functions. Given the present lack of institutional capability in each case, the effort needed will be long-term.

Mechanisms for Sector Assessments

The project has provided a very useful mechanism to allow Missions to conduct sector assessments, project planning, and limited research with a minimum amount of management effort. This is particularly significant in these days of reduced staff. Further, funds for the assessment and planning activities were available from the centrally-funded portion of the IEES project, with no contracting action on the part of the Mission required. Without this mechanism, many of the Missions might never have been able to go through the management/implementation steps necessary to carry out the activities. The pre-funded nature of the assistance that R&D/ED could provide through the project is a significant factor in the establishment of the practice of conducting education sector reviews. Further, the project provided a source of expertise experienced in conducting sector assessments that operated from the institutional base provided by the IEES contractor.

Contracting

The buy-in provision of the IEES project provided a convenient contracting mechanism. It was not necessary for the Mission to issue a Request For Proposal (RFP), select, and contract with the winning bidder. The Mission had only to prepare a Project Implementation Order for Technical Services (PIO/T), send it to A.I.D./Washington, and the contracts office

added a task order to the basic IEES contract. This could be accomplished either through a buy-in or an OYB transfer. Some activities identified in the course of or after the completion of a sector assessment took advantage of the buy-in mechanism. Some did not, and technical assistance was contracted for through other means.

Implementation

Some implementation problems resulted from the nature of a buy-in to a central project. The problems usually arose from difficulty in communications and lines of authority having to pass from the Mission through R&D/ED and then to the contractor and/or one of the subcontractors. This could have been avoided as there are contracting mechanisms that can shift to the field any level of management and/or control of funds that is desired, even though the activity is funded through a Task Order attached to a central project. The shift of authority might not have taken place in this project because R&D/ED wanted to retain a greater level of control. If so, it might well have been ill advised.

Research

The research *per se* has had little traceable impact on educational policy and planning. One can argue that this is to be expected in a project of this type. Further, research under Phase I was used as a development tool and the research conducted under Phase II has not had sufficient time to have made itself felt. If one were to look for a global impact of the research on education, how would one measure it? Is it likely that one could find little more than anecdotal evidence? There are some anecdotal examples of policy impact that can be given from Indonesia and Botswana while the JSEIP project was active. These are countries where there was a large presence and/or a large input of resources of other types. Where presence was limited, it is difficult to find examples even of an anecdotal nature.

Dissemination

Dissemination results seem to be poor. A relatively small number of most publications have been distributed. There are some notable exceptions. For example, the manual on conducting sector reviews and some of the sector review reports have been widely distributed. It must be pointed out that the Phase II contract instructed the contractor to engage in only limited dissemination efforts. International and professional conferences and academic publications were the two channels the contract instructed them to rely on. These are obviously limited audiences. Broader dissemination was to be the responsibility of other R&D/ED central projects.

Impact

In any development activity a threshold of resource input must be reached before one can expect any impact at all. Where that threshold is reached, one should be able to expect significant and lasting impacts to occur. This threshold is often referred to as a critical mass. A.I.D. has increasingly followed this principle in moving toward fewer but larger projects and sector programs. Relatively large IEES programs were implemented in Botswana, Indonesia, and Haiti, and one is now under way in Guinea. All have had the benefit of large bilateral buy-ins to the IEES project. The final evaluation on the Indonesia buy-in indicates significant and probably lasting impact. Botswana will be evaluated, and we venture the JSEIP buy-in activity will report the same results.

Where a threshold of resources is not reached, significant and lasting impact is not likely. This seemed to be the case in Nepal, and in the IEES efforts in the MOE in Botswana after the termination of the JSEIP project. The final summative evaluation, if conducted as the project ends in July of 1994, will be carried out 14 months after the departure of the RTA from Nepal and 20 months after the departure of the RTA from Botswana. A plausible working premise would be that compared to the absolute time and effort invested, little lasting effect will be found because the magnitude of the input still had not reached the threshold (critical mass) level.

Project Activities

The basic assumptions upon which the projects are based manifested themselves in the specification of four types of activities that were to lead to improved efficiency, effectiveness, and quality in the classroom. Only one of these has thus far been established as probably valid, that is, that sector assessments based on reliable data conducted with the participation of MOE can affect policy and planning decisions, hopefully resulting in improved efficiency and quality of education systems.

It is not yet established that an RTA working at the Ministerial level applying results of an EMIS, of policy analysis, and of research findings can affect decisions in such a way as to lead to more efficient and higher quality education. Nor is it clearly established that the planning approach that centered around reallocation of existing resources available to the system, mobilization of non-public (community) resources outside the system, and improved management or more efficient educational technologies would increase efficiency. Finally, it remains to be proven that research in the area of quality of teaching, teacher motivation, utilization of instructional materials and cost-effective methods of teacher training will lead to increased school quality and efficiency.

The contractor should marshal whatever evidence it can from experience and activities between now and the end of the project to support or modify the validity of the above as means to achieve efficiency and quality in education.

RECOMMENDATIONS

1. Continue activities in Indonesia as planned. A renewed resident presence is not anticipated by the contractor nor recommended. Activities to promote decentralization of the EMIS as described in the *IEES Plans for Project Year Nine* are appropriate.

2. Finish the research underway in Nepal. Continued resident presence after the present RTA has finished his contract in April of 1993 is not anticipated by the contractor nor recommended. Any further short-term assistance should focus on testing and improving the validity of data being collected for the EMIS.

3. Finish the research underway in Botswana. Any further needed assistance can be provided by the Mission's ongoing bilateral education project.

4. The present bilateral project in Guinea is probably all that can be absorbed at this time. It is possible that the Mission will request assistance with short-term studies in other areas. The limited remaining life of the IEES project precludes any long-term effort.

5. Products of the research effort should be organized, synthesized, and simplified, and conclusions and implications should be drawn. These should then be published in a form that is useful to LDCs, donor practitioners, planners, and policymakers. The other operationally-oriented products of the field activities that would be useful to practitioners need to be likewise packaged. For example, what has been learned about EMIS; the implementation of decentralization policies; and how one can conduct policy studies with unsophisticated LDC staff. The manual on sector assessments is a useful example of such a product.

6. Dissemination channels need to be broadened and intensified, especially to Missions, other donors, and LDCs to ensure the widest use of the above products.

7. There should be a "peer" review of the products resulting from the efforts described in paragraph five above before final publication. The review should be conducted by a group that includes a significant proportion of LDC and field practitioners to ensure maximum usefulness to the "field." This should be a working review.

    - We suggest a mini-assessment during the final phase of the project to determine the usefulness of the Botswana summary document now in preparation. A simple tally of who has read the document in selected schools and teacher training institutions, what they remember having read, and if they felt it was related to their needs and interests would be instructive.

- We also suggest a mini-assessment in the final phase of the project to elicit the perceptions of the intended clientele of such studies as to the utility of the findings. In addition, we would suggest an assessment of the usefulness of the methodologies used, and of the likely permanence of such methodologies within each country after the project is completed.

8. The magnitude of the effort to be allocated to the summative evaluation should be carefully considered. The possible benefits must be weighed against the very large cost of doing a complete evaluation. Whatever the size of the effort, the peer review described above could be an integral part of the summative evaluation.

9. A part of the final period of the project might be devoted to do a critical analysis of the project in each participating country (probably Botswana, Indonesia, and Nepal as these are the principal survivors). This critical analysis would be in two parts: the governments, local officials, and educators within the system would be asked, on their own, to do an analysis and assessment of the what the products and value have been in the local context; the international consultants, in turn, would write up what they think the products have been and their perception of the impact of these products. A part of the task would be to identify products (manuals, tools, research approaches, conceptual models, etc.) which both the national participants and the international consultants view as possibly useful to other countries. An international conference would then assemble the two groups to compare the results and to assemble a draft of a synthetic analysis of the two points of view (or perhaps multiple points of view).

10. On future projects, a small group of knowledgeable local educators in each country might be asked to serve as a source of information concerning the quality and relevance of the activities. They would be charged with the task of monitoring the project and assessing quality, efficiency, and relevance of activities and products in the context of the local setting. In this way, there would be some built-in protection from externally imposed models, activities, and products which may not mesh with local needs and interests.

    - We urge the consideration of a process something along these lines during the final months of the project. The effect of the project is not necessarily what the outside researchers involved think it is. The effect is in the eye of the beholder, and a comparison of the various beholders would indeed be useful.

11. If A.I.D. is to have a centrally-funded contract where Mission buy-ins are a feature and the desire is to prevent one source of funds from contributing to the objectives of the other, objectives should be more clearly specified and mechanisms to monitor the budgeting of resources should be incorporated. If the intent, as it seems to be in the IEES project, is to allow the two types of funds to be mutually supporting, where the whole can be more than the sum of the two, it should be so stated.

ANNEX A

Paradigmatic Concern

PARADIGMATIC CONCERN

We sense that the top-down systems model (paradigm) adopted by the project from the beginning has, indeed, been modified through experience. There are clearly many questions concerning the systems and related efficiency and effectiveness models originally accepted as doctrine in the project. In the final months of the project, attention should be directed to questioning and critically examining the models and assumptions originally made when the project was designed and contracted nearly ten years ago.

This final phase of the analysis of lessons learned should be a participatory phase, with local officials and educators in each country being encouraged to give their perceptions of the products of the project, with the idea of comparing their perceptions with those of the project managers and consultants. Attention should be given to looking toward models and approaches which were neglected in this project.

The conceptual framework for the project seems to be an amalgam of several loosely related prescriptions by several academics, primarily at SUNY/Albany and at FSU. Douglas Windham at SUNY/Albany has been interested in input/throughput/output models and indicators of educational efficiency for some time; Bob Morgan at FSU has been an advocate of systems approaches to the design of teaching/learning packages and programs for many years; Bruce Fuller at Harvard has developed various approaches for the application of social science research to the study of educational quality (usually defined as doing better in academic subjects); David Chapman at SUNY/Albany continued his interests in classroom observations and interviews in order to identify processes underway which may affect achievement; Fran Kemmerer at SUNY/Albany has long been interested in the possibility of providing teacher incentives in a way that would influence classroom practice.

Some of the questions which might be discussed by project personnel in concept papers during the final phase of the project include the following:

1. During the past fifteen years or so, there seems to have been considerable agreement among the international funding agencies on the concepts, terms, models (paradigms), and activities appropriate for rational educational planning for efficiency and effectiveness. Most of these were accepted by the project, either explicitly or implicitly in terms of their interests of consultants and researchers involved in the project. Which elements of these models have been found to be most valuable and why; which have been of limited use and why? What other concepts, terms, models, and activities were excluded because of the exclusivity of the model and of the key consultants on the project? Are there other ways of assessing efficiency, for example, that might have been used? Are there convincing arguments for other possible models or for a pragmatic, problem-oriented approach to improving education, rooted in the culture and dynamic of each country, which do not attempt to impose any one model of rational decision-making? Essentially, is education too messy, with

too many stakeholders to expect a true systems approach to arrive at rational decisions?

2. In a similar vein, what are the contradictions between a top-down systems approach, rooted in behavioral psychology and econometrics, and the notion of decentralization and planning, whereby local groups increasingly take charge of their educational systems? What other paradigms or models might be suggested to complement or modify the driving paradigm of the project? (Adams and others in one of the Indonesia documents, *Improving the Quality and Internal Efficiency of Education,* suggests an alternative client-based or community approach.)

3. In addition, what other models of decision-making might be suggested by the experience of the project? For example, other models might be based on grassroots needs assessments in different regions of a country, building from the ground up rather than the top down. Even the Indonesia project, which is attempting to decentralize planning, seems to be imposing the systems model, as practiced nationally and as growing out of the IEES model of efficiency and effectiveness, on the provinces. Are there other ethnographic or qualitative approaches which might work better or at least provide alternate views? Why should provinces necessarily be worried about efficiency based on achievement norms in subjects in other regions? Perhaps they should be concentrating (as suggested in one Indonesian paper) on relevant curriculum for their region instead. The planning models sifting down from above, however, may not encourage this.

4. What of the many "externalities" (parent, employer, politician, religious leader biases; interests and perceptions of appropriate educational outcomes; social philosophy factors; cultural style, etc.) have been found to be important (even if not measured) during the course of the project? These kinds of factors are often recognized as important by educators and policymakers and even given rhetorical recognition by systems analysts and educational economists but they are usually ignored in most econometric and efficiency studies.

5. Is the assumption that there must be a well-defined national reform strategy, based on quantifiable efficiency and effectiveness standards, supported by the experience of IEES? Why not a fully decentralized strategy of small innovation projects in provinces and towns rather than the homogenization of most national strategies?

6. There is some evidence that the EMIS has not been used in the way originally conceived in the ideal systems approach to educational efficiency and effectiveness. What has been learned as to the kinds of data useful to educators and decisionmakers? Are there other kinds of information, not included in the original model, that decisionmakers want and need? Are some of these kinds of information qualitative rather than quantitative? How might

information systems be expanded to include other kinds of information needed by educators and decisionmakers in developing countries?

7. Although the sector studies touched on aspects of education and training other than the formal school sector, these aspects were dropped in most follow-up activities. Was this not an oversight in retrospect? In these days of concern for looking at human resource development in a country as a global concept, of including what happens in programs under various ministries, and of including non-formal and informal education activities under both governmental and non-governmental sponsorship, can an educational project which purports to be global, comprehensive, and systematic deal only with what happens in schools? Another way to ask the question: in this era with increasing controversy (and often disillusionment) concerning how much and what school (formal) education can contribute to personal and societal goals, was it appropriate to drop other kinds of non-school educational interventions (non-formal, informal, various kinds of training outside the school, etc.) from consideration in the project?

8. The models (paradigms) for classroom observation and teacher motivation studies are, in a sense, a subset of the quantitatively oriented systems models which drove the original project conception. Are there questions concerning these models? Would there be simpler and more cost-effective ways of gathering these kind of data? Would other research methodologies suggest complimentary or alternative interpretations of what goes on in classrooms in different cultures?

9. In Botswana, Nepal and Indonesia, internal and external efficiency studies seemed to have been concentrated only in the latter. The notion of the usefulness of such studies originally was accepted as a doctrine of the project. Why were such studies not done in the other countries?

10. Internal efficiency is generally defined as the cost of producing graduates at various levels and in various kinds of schools and, implicitly, of improving the retention and achievement of students. Those not receiving degrees or repeating are considered wastage. In countries where many do not take posts in the modern sector, should those who drop out before receiving degrees be considered wastage? Should repetition rates necessarily be considered inefficiency in the system? What might be alternative interpretations of these phenomena? In countries where much (if not most) of the economy is in the informal sector, should external efficiency be considered essentially the degree to which graduates get jobs in the modern sector? What has been learned concerning the usefulness and limitations of such models?

11. Relevance of the curriculum is raised only in some of the Indonesia documents, where it was noted that some local schools are changing the curriculum to meet local needs as they see them. This appeared to be applauded and considered a possible positive outcome of decentralization, though it was noted that the

structure and dynamic of the educational system did not encourage such innovation. Is not top-down planning, as exemplified in the driving metaphor of the project, to some degree incompatible with the encouragement of local initiative and innovation in establishing goals, planning, and developing curriculum and methods?

12. Research methodology seemed to be of the traditional multivariate analysis variety rather than the participatory research approaches normally associated with change-oriented research projects. Essentially, if you want teachers to change, involve them as full participants in change-oriented studies and you may find that change occurs as a product of the research. This was not the approach followed in this project, which took the traditional approach of using teachers and students as subjects for study rather than participants in the study. Are there questions that this raises in terms of models to be used in the future in projects with similar goals?

13. Since most of the research in Phase II of the project used highly sophisticated and costly methodology and was published in research journals which cater to the U.S. and western scholars, could the project be accused of using participating countries to mine data useful to the researchers rather than doing research primarily for the benefit of local educators and teachers? Would not an appropriate alternative have been to concentrate on how to obtain similar data in the least complicated and least costly way, so as to be appropriate for the local context in within which each project was operating?

ANNEX B

List of Publications

IMPROVING THE EFFICIENCY OF EDUCATIONAL SYSTEMS PROJECT DOCUMENTS

Improving the Efficiency of Educational Systems (IEES) is a ten-year initiative funded by the Agency for International Development (AID), Bureau for Science and Technology, Office of Education. The principal goals of the IEES Project are to help developing countries improve the performance of their educational systems and strengthen their capabilities for educational planning, management, and research. To achieve these goals, a consortium of U.S. Institutions works collaboratively with host governments and USAID Missions. The IEES Consortium consists of The Florida State University (prime contractor) Howard University, the Institute for International Research, and the State University of New York at Albany.

IEES publications are disseminated to promote improved educational practice, planning, and research within developing countries. All IEES publications are held in the Educational Efficiency Clearinghouse at the Florida State University.

I. IEES MONOGRAPHS

The Evaluation of Efficiency in Educational Development Activities (April 1986)

Indicators of Educational Effectiveness and Efficiency (February 1988)

Education and Human Resources Sector Assessments (August 1988)

II. IEES TRAINING MATERIALS

Microcomputer Applications for Education Planning and Management (4 Modules) (December 1986)

Policy Analysis Workshop Training Manual (3 Vols) (January 1988)

Policy Analysis Workshop Training Manual (French) (January 1988)

JSEIP: The World of Educational Innovations (Computer-based Educational Game) (January 1989)

Introduction to Computer Applications in Educational Data Processing (June 1989)

Manpower Planning Project Training Workshop (3 Volumes) (January 1989)

A Guide to Educational Training Materials: A Review of Training Materials from IEES and Other Assistance Agencies (June 1989)

(see IEES Field Papers [VIII below] for other training materials)

III. POLICY RESEARCH INITIATIVE DOCUMENTS

Proposed Structure for IEES Policy Research Initiative (March 1986)

IEES Policy Research Initiative: Planning and Proposals (March 1987)

Botswana: Strengthening Local Education Capacity through Community Involvement (November 1987)

Botswana: Strengthening Local Education Capacity through Community Involvement (December 1987)

Education Management Information Systems: Status Reviews
Somalia (April 1988)
Yemen Arab Republic (September 1987)

42

III. POLICY RESEARCH INITIATIVE DOCUMENTS (Continued)

Teacher Incentive Systems: Status Reviews
Haiti (June 1988)
Liberia (September 1987)
Somalia (February 1988)

Indonesia Status Report: "Constraints and Opportunities: Strengthening Local Education Capacity" (May 1988)

Indonesia: Strengthening Local Education Capacity—Phase II: Second Quarterly Report (October 1988)

Liberia: Teacher Incentive Systems (March 1989)

Education Management Information Systems: Final Report (May 1989)

Teacher Incentive Systems: Final Report (May 1989)

Strengthening Local Education Capacity: Final Report (May 1989)

IV. COUNTRY DOCUMENTS

BOTSWANA

Botswana Education and Human Resources Sector Assessment (June 1984)

Botswana Sector Assessment Executive Summary (June 1984)

Botswana Project Paper: Junior Secondary Improvement Project (JSEIP) (December 1984)

Botswana IEES Country Plan (June 1985)

JSEIP Semi-Annual Progress Report (1 Oct. 1985-31 March 1986)

Botswana Sector Assessment Update (March 1986)

JSEIP Internal Mid-Project Review (June 1987)

Evaluation Plans for the Junior Secondary Curriculum and Management Activities of the Botswana MOE (December 1987)

JSEIP Work Plan (October 1987-December 1988)

JSEIP Project Outputs (February 1988)

GHANA

Economic and Financial Analysis of the Ghana Education Sector (November 1989)

Macroeconomic Overview of Ghana (November 1989)

Primary School Teachers in Ghana (November 1989)

GUINEA

Economic Analysis of the Educational System of Guinea (June 1990)

Training, Monitoring, and Evaluation Needs Assessment of the Education System of Guinea (June 1990)

HAITI

Improving Incentives for Basic Education (IIBE) Project Paper (Draft 1985)

Synthèse: Evaluation de Secteur de l'Education et des Ressources Humaines d'Haiti (June 1985)

Resume: Evaluation de Secteur de l'Education et des Ressources Humaines d'Haiti (August 1985)

IIBE Semi-Annual Progress Report (March 1987)

IV. COUNTRY DOCUMENTS (Continued)

Haiti Education and Human Resources Sector Assessment (English with French Summaries) (March 1987)
Volume I
Volume II
Volume III
Volume IV

Haiti Country Implementation Plan, Project Years 3-4 (June 1987)

IIBE First Annual Report (July 1986-July 1987)

IIBE Semi-Annual Progress Report (July - December 1987)

IIBE Semi-Annual Progress Report (December – July 1988)

IIBE Mid-Term Evaluation (June 1989)

INDONESIA

Educational Policy and Planning (EPP) Project Paper (Draft) (June 1984)

EPP Policy Study (MIS Report) (1986)

Microcomputer Applications for Education Planning and Management: A Modular Training Program (December 1986)

Indonesia Education and Human Resources Sector Review (April 1986)
Volume I
Volume II
Volume III

Indonesia Country Implementation Plan (May 1987)

EPP Policy Study: A Guide to Medium-Term Manpower Planning for the MOEC Executive Summary (May 1987)

The Economics of Vocational and Technical Education: Do the Benefits Outweigh the Costs? (July 1987)

EPP Project Reports: January 1987 - March 1988; Draft Action Plan for 1988-89 (June 1988)

EPP Action Plan: FY 1988-89

Policy Research Brief: Improving the Quality of Basic Education in Indonesia

Policy Research Brief: The Quality and Efficiency of Vocational/Technical Education in Indonesia (July 1988)

Potential Resource Recovery in Higher Education in the Developing Countries and Parents' Expected Contribution (July 1988)

A Specific Program for Refinement and Phasing in of a Computerized School Aid Formula for Indonesia (July 1988)

EPP: Vocational and Technical Education in Indonesia: Theoretical Analysis and Evidence on Rates of Return (July 1989)

Indonesian National Curriculum Reform Strategy Paper (March 1990)

A Review of Teacher Education Issues in Indonesia (June 1990)

LIBERIA

Liberia Education and Training Sector Assessment (December 1983)

Background Papers in Liberian Educational Development (October 1986)

The Feasibility of Integrating Programmed Learning with Conventional Instruction in Liberia Primary Education (November 1986)

Liberia Education and Human Resources Sector Assessment (September 1988)

IV. COUNTRY DOCUMENTS (Continued)

NEPAL

Nepal Country Workplan (June 1986)

Nepal Country Implementation Plan (March 1988)

Nepal Education and Human Resources Sector Assessment (May 1988)

Improving the Efficiency of Primary Education (January 1990)

SOMALIA

Somalia Education and Human Resources Sector Assessment (January 1984)

Somali Civil Service Study (July 1984)

Enhancement of School Quality in Somalia (August 1985)

Strategies for Enhancing the Quality of Education in Somalia (January 1986)

The Distribution of Instructional Materials in Somalia: Strategies for Improving the Textbook Distribution System of the Somali Education System (August 1986)

Incentives for Primary Teaching in Somalia (October 1986)

SOOMALI-ENGLISH/ENGLISH-SOOMALI Technical Term Dictionary of Economics (December 1986)

The Integrated Strategy for Improving the Primary Education in Somalia (January 1987)

Somalia Country Workplan 1987-88 (October 1987)

Somalia Country Implementation Plan for IEES Activities (Update) (April 1988)

EMIS Status Report (April 1988)

YEMEN ARAB REPUBLIC (YAR)

YAR Education and Human Resources Sector Assessment (January 1986)

YAR Sector Assessment Executive Summary (Arabic) (January 1986)

YAR Country Plan (February 1986)

Proposal for the Design of an EMIS for the YAR (July 1986)

YAR Country Implementation Plan (May 1987)

V. PROJECT PLANNING DOCUMENTS

IEES Project Plan: Years One and Two

IEES Project Plan: Year Three

IEES Project Plan: Year Four

IEES Project Plan: Year Five

IEES Project Plan: Year Six

VI. PROGRESS REPORTS

IEES Annual Report June 1984 - June 1985

IEES Semi-Annual Progress Report 6/11/85 - 12/10/85

IEES Semi-Annual Progress Report 12/11/85 - 6/10/86

VI. PROGRESS REPORTS (Continued)

IEES Semi-Annual Progress Report 6/11/86 - 12/10/86

IEES Semi-Annual Progress Report 12/11/86 - 6/10/87

IEES Semi-Annual Progress Report 6/11/87 - 12/10/87

IEES Semi-Annual Progress Report 12/11/87 - 6/10/88

IEES Mid Year Progress Summary 6/11/88 - 12/10/88

IEES Final Report: Phase 1 (May 1989)

VII. OTHER IEES PROJECT DOCUMENTS

IEES Strategies for Improving Educational Efficiency (April 1985)

Project Description — French (February 1987)

Project Description (February 1988)

IEES Project Summary (February 1988)

IEES External Mid-Term Evaluation (July 1988)

VIII. IEES FIELD PAPERS

IEES Field Papers are brief outlines, guides, or summaries produced by consultants or staff as part of the long-term IEES assistance strategy. Some of these papers are products of USAID-funded and IEES-administered field projects now underway. These papers are copied and disseminated in their original, unedited form because of their potential usefulness to technical staff, planners, and decisionmakers in developing nations and to agencies assisting those nations.

BOTSWANA

Workshop Outline on Writing Test Questions (November 1986)

Instructional Design Course, Unit Three: Aims and Objectives (June 1987)

Instructional Design Course, Unit Four: Events of Instructions (November 1987)

Instructional Design Course, Unit Six: Teaching Methods, Techniques and Learning Activities (November 1987)

Instructional Design Course, Unit Seven: Lesson Notes and Lesson Plans (November 1987)

The Chalkboard: A Primer on Effective Chalkboard Use (September 1987)

Some Issues in Designing a "Practical Science" Curriculum (September 1987)

Summary of the Microteaching Clinic at Molepolole College of Education (September 1987)

Education Program Evaluation Guidelines for Botswana (1988 Edition)

Reading with Understanding: Guidelines for Teachers (1988)

LIBERIA

Outline for a Workshop on Criterion Referenced Test Development (August 1984)

Inservice Teacher Training Curriculum for the Liberian Primary Education Project (December 1987)

Training Manual for Interviewers for IEES PRI Teacher Incentive Systems (1988)

VIII. IEES FIELD PAPERS (Continued)

NEPAL

Outline for an Information Management Workshop (July 1986)

SOMALIA

A Primary Teacher Guide: How to Write a Module (December 1986)

Outline for a Workshop on Advanced Computer and Statistical Topics (April 1987)

Outline for a Workshop on Systems Approach to Planning (June 1986)

YEMEN ARAB REPUBLIC

Proposal for the Design of an EMIS for the Yemen MOE (June 1986)

Outline for an Annual School Survey (with Arabic Notes) (February 1987)

Outlines for Workshops in Data Coding and Computer Entry (March 1986)

Microcomputer/Data Processing Course Outline (English with Arabic notes) (1988)

IX. OTHER IEES RESEARCH PAPERS

Botswana: Research and Testing Centre Curriculum Development and Evaluation (March 1988)

Indicators of Quality in Botswana Primary Education (June 1988)

Coding and Analyzing Field Survey Data (July 1988)

Policy and Organization in Curriculum Development in Botswana (August 1989)

Curriculum in Action: Classroom Observations in Botswana Junior Secondary School 1987-1989 (November 1989)

Please send requests for project information or publications to:

Jerry L. Messec, Director
IEES Educational Efficiency Clearinghouse
204 Dodd Hall
The Florida State University
Tallahassee, FL 32306-4041 USA
Phone (904) 644-5442
Telex: 6502682639 (MCI)
FAX: (904) 644-3783

IEES is a USAID project.
United State Agency for International Development
Bureau for Science and Technology
Office of Education
Contract No. DPE-5823-Z-00-9010-00
Project No. 936-1084

ANNEX C

Dissemination List

IMPROVING THE EFFICIENCY OF EDUCATIONAL SYSTEMS
DISSEMINATION LIST OF IEES PROJECT DOCUMENTS
JULY 1992

DOCUMENT TITLE	# OF COPIES DISSEMINATED
I. IEES MONOGRAPHS	
The Evaluation of Efficiency in Educational Development Activities (April 1986). Document Code No. XGMN 001. $10.00	657
Indicators of Educational Effectiveness and Efficiency (February 1988). Document Code No. XGMN 002. $7.00.	681
Education and Human Resources Sector Assessments (August 1988). Document Code No. XGMN 003. $9.40.	542
The Political Economy of Education in the Sahel (October 1991). Document Code No. XGMN 004. $6.35.	41
Collaborative Design of Educational Indicator Systems in Developing Countries: An Interim Report on an IEES Project Initiative (March 1991). Document Code No. XGMN 005. $7.	76
Developing Educational Information Systems and the Pursuit of Efficiency in Education: Eight Years of IEES Project Experience (June 1992). Document Code XGMN 006. $8.80.	82
I. RESEARCH REPORTS	
Proposed Structure for IEES Policy Research Initiative (March 1988). Document Code No. XGM 001. $8.56.	64
IEES Policy Research Initiative: Planning and Proposals (March 1987). Document Code No. XGM 002. $22.05.	27
Education Management Information Systems: Final Report (May 1989).	

51

Evaluation Plans for the Junior Secondary Curriculum and Management Activities of the Botswana MOE (December 1987).
Document Code No. BWCB 008. $10.90. 61

JSEIP Work Plan (October 1987 - December 1988).
Document Code No. BWCB 009. $11.92. 28

JSEIP Project Outputs (February 1988).
Document Code No. BWCB 010. $5.50. 49

Botswana: Country Implementation Plan for IEES Activities (July 1990).
Document Code No. BWCB 011. $3.46. 30

JSEIP: Guidance and Counseling Training of Guidance Practitioners (August 1990).
Document Code No. BWCB 012. $2.74. 59

JSEIP Final Report: Project Summary and Lessons Learned (December 1991).
Document Code No. BWCB 013. $7.30. 47

GHANA

Economic and Financial Analysis of the Ghana Education Sector (November 1989).
Document Code No. GHCB 001. $3.64. 52

Macroeconomic Overview of Ghana (November 1989).
Document Code No. GHCB 002. $2.80. 12

Primary School Teachers in Ghana (November 1989).
Document Code No. GHCB 003. $ NA. 3

GUINEA

GUINEA Economic Analysis of the Educational System of Guinea (June 1990).
Document Code No. GNCB 001. $ NA. 56

Training, Monitoring, and Evaluation Needs Assessment of the Education System of Guinea (June 1990).
Document Code No. GNCB 002. $ NA. 6

HAITI

Improving Incentives for Basic Education (IIBE) Project Paper (1985). Document Code No. HTCB 001. $ NA.	19
Synthese: Evaluation de Sector de l'Education et des Resources Humaines d'Haiti (June 1985). Document Code No. HTCB 002. $4.95.	134
Resume: Evaluation de Secteur de l'Education et des Resources Humaines d'Haiti (August 1985). Document Code No. HTCB 003. $20.70.	144
IIBE Semi-Annual Progress Report (March 1987). Document Code No. HTCB 004. $5.56.	38
Haiti Education and Human Resources Sector Assessment (English with French Summaries) (March 1987). Document Code No. HTCB 005. $48.50.	292
Volume I	
Volume II	
Volume III	
Volume IV	
Haiti Country Implementation Plan, Project Years 3 - 4 (June 1987). Document Code No. HTCB 006. $8.30.	32
IIBE First Annual Report (July 1986 - July 1987). Document Code No. HTCB 007. $ NA.	12
IIBE Semi-Annual Progress Report (July - December 1987). Document Code No. HTCB 008. $8.14.	28
IIBE Semi-Annual Progress Report (December 1987 - July 1988). Document Code No. HTCB 009. $ NA.	35
IIBE Mid-Term Evaluation (June 1989). Document Code No. HTCB 010. $ NA.	27

INDONESIA

Education Policy and Planning (EPP) Project Paper (Draft) (June 1984). Document Code No. IDCB 001. $ NA.	41
EPP Policy Study (MIS Report) (1986). Document Code No. IDCB 002. $3.28.	65
Microcomputer Applications for Education Planning and Management: A Modular Training Program (December 1986). Document Code No. IDCB 003. $20.90.	106
Indonesia Education and Human Resources Sector Review (April 1986). Document Code No. IDCB 004. $80.60. Volume I Volume II Volume III	239
Indonesia Country Implementation Plan (May 1987). Document Code No. IDCB 005. $10.40.	38
EPP Policy Study: A Guide to Medium-Term Manpower Planning for the MEC Executive Summary (May 1987). Document Code No. IDCB 006. $4.60.	62
The Economics of Vocational and Technical Education: Do the Benefits Outweigh the Costs? (July 1987). Document Code No. IDCB 007. $ NA.	40
EPP Project Reports: January 1987 - March 1988; Draft Action Plan for 1988-89 (June 1988). Document Code No. IDCB 008. $4.35.	33
EPP Action Plan: FY 1988-89 (date ?). Document Code No. IDCB 009. $ NA.	45
Policy Research Brief: Improving the Quality of Basic Education in Indonesia (date ?). Document Code No. IDCB 010. $ NA.	61

Policy Research Brief: The Quality and Efficiency of Vocational/Technical Education in Indonesia (July 1988).
Document Code No. IDCB 011. $ 4.72. 88

Potential Resource Recovery in Higher Education in the Developing Countries and Parents' Expected Contribution (July 1988).
Document Code No. IDCB 012. $ NA. 35

A Specific Program for Refinement and Phasing in of a Computerized School Aid Formula for Indonesia (July 1988).
Document Code No. IDCB 013. $ NA. 21

EPP: Vocational and Technical Education in Indonesia: Theoretical Analysis and Evidence on Rates of Return (July 1989).
Document Code No. IDCB 014. $ NA. 39

Indonesian National Curriculum Reform Strategy Paper (March 1990).
Document Code No. IDCB 015. $ NA. 87

An Analysis of the Status of Curriculum Reforms and Textbook Production in Indonesia (April 1990).
Document Code No. IDCB 016. $7.42. 165

A Review of Teacher Education Issues in Indonesia (June 1990).
Document Code No. IDCB 017. $5.08. 165

25-Year Development Plan, Volumes I and II
Document Code No. IDCB 018. Vol. I, $20.76;
Vol. II, $11.92. 170

Curriculum Reform Activity:
Science and Mathematics (August 1991).
Document Code IDCB 019. $3.82. 165

The Indonesian School Principal:
Broadening Responsibility (June 1992).
Document Code IDCB 020. $3.76. 55

Literature Review on Decentralization:
Strengthening Local Educational Capacity (June 1992).
Document Code IDCB 021. $4.12. 55

EPP Project: Summary of Activities and Policy Studies (June 1992).
Document Code IDCB 022. $10.48. 55

Policy Review of the Primary and Junior Secondary Education Sub-Sectors in East-Java (June 1992).
Document Code IDCB 023. $9.10. 75

Policy Review of the Primary and Junior Secondary Education Sub-Sectors in South Sulawesi (June 1992).
Document Code IDCB 024. $4.12. 75

Sector Review Workshops I and II - East Java P., West Java P., South Sulawesi P. (June 1992).
Document Code IDCB 025 . $5.56. 75

Policy Review of the Primary and Junior Secondary Education Sub-Sectors in West-Java (June 1992).
Document Code IDCB 026. $7.84. 75

Improving the Educational Quality of Primary Schools (June 1992).
Document Code 029. $5.60. 165

Education Indicators for Policy Purposes in Indonesia (June 1990).
Document Code 030. $4.55. 165

Education and the Economy: The External Efficiency of Education (June 1992).
Document Code 031. $4.83. 173

Education, Economic, and Social Development: Second 25 Year Development Plan and Sixth 5 Year Development Plan: Background Papers and Goals (June 1992).
Document Code 032. $9.66. 172

LIBERIA

Liberia Education and Training Sector Assessment (December 1983).
Document Code No. LRCB 001. $21.50. 88

Background Papers in Liberian Educational Development (October 1986).
Document Code No. LRCB 002. $8.92. 35

16

The Feasibility of Integrating Programmed Learning with Conventional Instruction in Liberia Primary Education (November 1986).
Document Code No. LRCB 003. $6. 219

Liberia Education and Human Resources Sector Assessment (September 1988).
Document Code No. LRCB 004. $9.10. 208

MALAWI

Malawi Female Education Study
Document Code No. MWCB 001. $9.58. 25

NAMIBIA

Basic Education in Namibia: Sector Review Report (December 1990).
Document Code No. NACB 001. $8.95. 184

NEPAL

Nepal Country Workplan (June 1986).
Document Code No. NPCB 001. $9.20. 27

Nepal Country Implementation Plan (March 1988).
Document Code No. NPCB 002. $6.10. 29

Nepal Education and Human Resources Sector Assessment (May 1988).
Document Code No. NPCB 003. $17. 139

Improving the Efficiency of Primary Education (January 1990).
Document Code No. NPCB 004. $6.64. 77

Building an Information System for Efficiency Improvement (1990?).
Document Code No. NPCB 005. $ NA. 82

Training Teachers at a Distance: A Case Study of Nepal's Radio Education Teacher Training Project
Document Code No. NPCB 006. $7.18. 33

Final Report: PRI/EMIS (May 1989)-- Nepal and Somalia study.
Document Code No. NPCB 007. $12.50. 80

SENEGAL

Summary Assessment of the Education Sector in Senegal.
Document Code No. SNCB 001. $9.50. 60

SOMALIA

Somalia Education and Human Resources Sector Assessment (January 1984).
Document Code No. SOCB 001. $13.80. 212

Somali Civil Service Study (July 1984).
Document Code No. SOCB 002. $18.05. 141

Enhancement of School Quality in Somalia (August 1985).
Document Code No. SOCB 003. $22.25. 98

Strategies for Enhancing the Quality of Education in Somalia (January 1986).
Document Code No. SOCB 004. $5.30. 90

The Distribution of Instructional Materials in Somalia: Strategies for Improving the Textbook Distribution System of the Somali Education System (August 1986).
Document Code No. SOCB 005. $7.20. 79

Incentives for Primary Teaching in Somalia (October 1986).
Document Code No. SOCB 006. $4.40. 67

SOOMALI-ENGLISH/ENGLISH-SOOMALI Technical Term Dictionary of Economics (December 1986).
Document Code No. SOCB 007. $10.25. 54

The Integrated Strategy for Improving the Primary Education in Somalia (July 1987).
Document Code No. SOCB 008. $5.00 101

Somalia Country Workplan 1987-88 (October 1987).
Document Code No. SOCB 009. $7.18. 31

Somalia Country Implementation
Plan for IEES Activities (Update)
(April 1988).
Document Code No. SOCB 010. $5.92. 40

YEMEN

Yemen Education and Human Resources
Sector Assessment (January 1986).
Document Code No. YECB 001. $26.40. 199

Yemen Sector Assessment Executive
Summary (Arabic) (July 1986).
Document Code No. YECB 002. $5. 150

Yemen Country Plan (February 1986).
Document Code No. YECB 003. $7.48. 36

Proposal for the Design of an EMIS
for Yemen (July 1986).
Document Code No. YECB 004. $6.10. 80

Yemen Country Implementation Plan
(May 1987).
Document Code No. YECB 005. $6.10. 40

V. PROJECT PLANNING DOCUMENTS

IEES Project Plan: Years One and Two.
Document Code No. XGPL 001. $9.95. 100

IEES Project Plan: Year Three.
Document Code No. XGPL 002. $14.45. 92

IEES Project Plan: Year Four.
Document Code No. XGPL 003. $17.20. 87

IEES Project Plan: Year Five.
Document Code No. XGPL 004. $.7.72. 101

IEES Project Plan: Year Six.
Document Code No. XGPL 005. $8. 79

IEES Project Plans for Year Seven.
Document Code No. XGPL 006. $ NA. 90

IEES Project Plans for Year Eight.
Document Code No. XGPL 007. $ NA. 68

VI. PROGRESS REPORTS

IEES Annual Report June 1984 - June 1985. Document Code No. XGPR 001. $8.60.	52
IEES Semi-Annual Progress Report 6/11/85 - 12/10/85. Document Code No. XGPR 002. $9.65.	41
IEES Semi-Annual Progress Report 12/11/85 - 6/10/86. Document Code No. XGPR 003. $11.50.	55
IEES Semi-Annual Progress Report 6/11/86 - 12/10/86. Document Code No. XGPR 004. $12.15.	39
IEES Semi-Annual Progress Report 12/11/86 - 6/10/87. Document Code No. XGPR 005. $20.60.	45
IEES Semi-Annual Progress Report 6/11/87 -12/10/87. Document Code No. XGPR 006. $17.40.	40
IEES Semi-Annual Progress Report 12/11/87 - 6/10/88. Document Code No. XGPR 007. $6.80.	42
IEES Mid Year Progress Summary 6/11/88 -12/10/88. Document Code No. XGPR 008. $.NA.	37
IEES Final Report: Phase 1 (May 1989). Document Code No. XGPR 009. $13.	226

VII. OTHER IEES PROJECT DOCUMENTS

WHAT IS IEES? (Brochure)	3,321
IEES BULLETIN (Periodical)	2,481
IEES Strategies for Improving Educational Efficiency (April 1985). Document Code No. XGPD 001. no charge.	580
Project Description - French (February 1987). Document Code No. XGPD 002. no charge.	350

IEES Description (February 1988).
Document Code No. XGPD 003. no charge. 400

IEES Project Summary (May 1988).
Document Code No. XGPD 004. no charge. 300

IEES External Mid-Term Evaluation
(July 1988).
Document Code No. XGPD 005. no charge. 35

VIII. FIELD PAPERS

BOTSWANA

Workshop Outline on Writing Test
Questions (November 1986).
Document Code No. BWFP 001. $4.00 65

Instructional Design Course, Unit Three:
Aims and Objectives (June 1987).
Document Code No. BWFP 002. $5.30. 70

Instructional Design Course, Unit Four:
Events of Instructions (November 1987).
Document Code No. BWFP 003. $4.20. 60

Instructional Design Course, Unit Six:
Teaching Methods, Techniques and Learning
Activities (November 1987).
Document Code No. BWFP 004. $4.20. 73

Instructional Design Course, Unit Seven:
Lesson Notes and Lesson Plans
(November 1987).
Document Code No. BWFP 005. $4.00. 70

The Chalkboard: A Primer on Effective
Chalkboard Use (September 1987).
Document Code No. BWFP 006. $4.48. 46

Some Issues in Designing a "Practical
Science" Curriculum (September 1987).
Document Code No. BWFP 007. $3.04. 32

Summary of the Microteaching Clinic at
Molepolole College of Education
(September 1987).
Document Code No. BWFP 008. $4.50. 30

Education Program Evaluation Guidelines
for Botswana (1988).
Document Code No. BWFP 009. $5.68. 60

Reading With Understanding: Guidelines
for Teachers (1988 Edition).
Document Code No. BWFP 010. $5.70. 52

LIBERIA

Outline for a Workshop on Criterion
Referenced Text Development (August 1984).
Document Code No. LRFP 001. $4.70. 85

Inservice Teacher Training Curriculum
for the Liberian Primary Education
Project (December 1987).
Document Code No. LRFP 002. $5.80? 70

Training Manual for Interviewers for
IEES PRI Teacher Incentive Systems (1988).
(July- Code No. LRFP 003. $4.15. 100

NEPAL

Outline for an Information
Management Workshop (July 1986).
Document Code No. NPFP 001. $ NA. 75

SOMALIA

A Primary Teacher Guide: How to
Write a Module (December 1986).
Document Code No. SOFP 001. $4.00. 80

Outline for a Workshop on Advanced Computer
and Statistical Topics (April 1987).
Document Code No. SOFP 002. $4.50. 85

Outline for a Workshop of Systems
Approach to Planning (July 1986).
Document Code No. SOFP 003. $ NA. 65

YEMEN

Proposal for the Design of an EMIS for the
Yemen MOE (June 1986).
Document Code No. YEFP 001. $5.86. 90

67

Outline for an Annual School Survey (with Arabic Notes) (February 1987).
Document Code No. YEFP 002. $ NA. 40

Outlines for Workshops in Data Coding and Computer Entry (March 1986).
Document Code No. YEFP 003. $3.60. 65

Microcomputer/Data Processing Course Outline (English with Arabic notes) (1988).
Document Code No. YEFP 004. $8.90. 83

IX. OTHER IEES RESEARCH REPORTS

Botswana: Research and Testing Centre Curriculum Development and Evaluation (March 1988).
Document Code No.BWOR 001. $6.70. 48

Indicators of Quality in Botswana Primary Education (June 1988).
Document Code No. BWOR 002. $3.60. 85

Coding and Analyzing Field Survey Data (July 1988).
Document Code No. BWOR 003. $NA. 40

Policy and Organization in Curriculum Development in Botswana (August 1989).
Document Code No. BWOR 004. $4.00 55

Curriculum in Action: Classroom Observations in Botswana Junior Secondary School 1987-1989 (November 1989).
Document Code No. BWOR 005. $8.40. 70

63

ANNEX D

Botswana Field Report

BOTSWANA

Background

The external mid-term evaluation team visited the Botswana Mission from October 20 through October 27, 1992 and met with representatives from the MOE, USAID, and IEES (see Annex F).

IEES activities began in Botswana in 1984, as a part of a larger centrally-funded, ten year initiative, carried out in a number of other countries. In Botswana, IEES was actually comprised of two projects: (1) a centrally-funded IEES Project consisting primarily of technical assistance to the MOE by an RTA; and (2) a USAID Botswana Mission-funded project entitled the Junior Secondary Educational Improvement Project (JSEIP) which concluded in December 1991.

The two components operating under the IEES umbrella worked closely to carry out a number of complimentary activities, especially in the areas of basic educational research.

During the first few years, the IEES Project in Botswana was concentrated primarily on database development, computer training, and technical assistance to the MOE Planning Unit. Among the activities initially carried out through IEES were:

1. An education and human resources sector assessment (and periodic updates).

2. Training of MOE staff in computer use.

3. A review of the materials and supplies procurement procedures.

4. The development of a number of MOE databases.

When IEES activities began in Botswana, few information databases were in existence. One of the most important accomplishments during that time was the establishment of computerized tracking systems in the Departments of Primary Education, Non-formal Education and the Unified Teaching Service (UTS). These systems were developed through assistance from the IEES Adviser and two Peace Corps volunteers, and contain information on the number and characteristics of teachers and students. More recently (1990), databases in the Bursaries Department were also developed to track student scholarship information.

In addition, a Database Managers Group was established to exchange information, discuss issues related to development of individual databases, and to establish common procedures for use by all MOE departments/units regarding coding, selection of software, and dissemination of information. The group is comprised of staff from the various departments within MOE, from the Central Statistics Office, and from the University of Botswana who are responsible for developing and maintaining databases.

IEES Phase II activities began in Botswana with the arrival of the RTA, Dr. Shirley Burchfield, in October 1989. Assistance has since been focused in four areas:

1. Technical assistance to the Planning Unit.

2. Database development and information coordination.

3. Training.

4. Research.

Technical Assistance to the Planning Unit

All IEES RTAs in Botswana have worked directly with the MOE Planning Unit. MOE Planning Officers are employed by the Ministry of Finance and Development Planning (MFDP) and have responsibilities relating to both the MOE and MFDP. During the past three years, IEES technical assistance to the Planning Unit has included:

1. Compiling and maintaining the Planning Unit's databases on schools, teachers, enrollments, etc.

2. Carrying out school mapping and identifying primary feeder schools for the Community Junior Secondary Schools (CJSSs).

3. Assisting in developing a proposal for the establishment of a Research and Planning Department.

4. Carrying out student and teacher projections.

Database Development and Information Coordination

IEES has also assisted in the development of an EMIS for policy and planning decisions. As mentioned earlier, several computer databases have been established over the past few years. Currently, educational information is compiled and maintained in seven departments:

1 Planning Unit.

2. Unified Teaching Service.

3. Department of Primary Education.

4. Department of Secondary Education.

5. Department of Non-formal Education.

6. Department of Bursaries.

7. Department of Teacher Education.

Training

A primary objective of the IEES project has been to strengthen MOE institutional capacity in educational planning, management, and research. During the past three years, the focus has been on providing training in computer usage and analysis. Training activities carried out under IEES during 1990-1992 included a 4-week training program for 25-30 MOE staff from Planning, Bursaries, Primary, Secondary, Non-formal Administration, and UTS in DBase III Plus and an Introduction to Computers course.

Research

IEES and JSEIP staff have collaborated on several research initiatives. Initially most of the research was funded and managed by JSEIP with input from IEES. However, as JSEIP phased out, IEES took over most of the funding for the research program. A three year longitudinal collection of data of junior secondary school teachers included classroom observation, teacher self-report, quality of teacher worklife, and student achievement data. The main focus was on the relationship of teacher training, teacher incentives and teachers' personal characteristics to teachers' classroom behavior and the quality of their worklife.

Findings

The Permanent Secretary would like a continuation of the assistance given by Ms. Burchfield. He fears that the Planning Unit will cease to function, or at least not be able to fill his needs if she is not replaced. The fear is that as soon as the expatriate leaves, the units will collapse. His Deputy, on the contrary, thinks it is time for the Ministry to decide if the unit can be managed without expatriate assistance.

EMIS

The MOE Planning Unit is not part of the MOE but is rather a unit of the Ministry of Finance and Planning (MOFP). It is located within the MOE so as to keep track of data and be closer to the place where the data they need is generated. The career tracks of these individuals are controlled by the MOFP not the MOE. Any advancement beyond director or assistant director of the unit must be preceded by "training," access to which is controlled by the MOFP. The MOE does, however, prepare the "efficiency" report for the director of the unit.

The overall EMIS function is fragmented with little or no experienced staff. The central unit in the MOE has an acting director who is looking forward to training so he can be promoted (out of the unit) and only one other of the four positions is filled.

The integrating, standardizing,and centralizing of the EMIS functions remain a future MOE objective.

The Central Statistics Office actually puts together and publishes the national educational statistics.

The MOE is forming a new Statistics, Planning and Research division. The RTA helped with the conceptualization of the unit. The new division will consist of five units: (1) Education Projects Monitoring and Evaluation; (2) Education Information and Statistics; (3) Education Research; (4) Division Management; and (5) Education Planning. The new division is to be staffed by MOE personnel.

The overall EMIS system is fragmented, consisting of seven separate units. The software used is comparable and data are frequently shared between systems. The Planning Unit's EMIS at present would not have the staff to collect and maintain a unified system.

Staff turnover is a major part of the problem as is the duplication of effort. Three databases contacted the same teachers.

The Ministry EMIS as a whole is a collection of mini systems. Most units pretty much do their own thing. They are not uniform in the classes of data presented, and there is resultant duplication. Databases, however, use compatible programs and can be downloaded from one system to another.

One MOE official stated that IEES developed a database for the non-formal education department that was so complicated that no one could use it. They (MOE) contracted with a local firm and had one designed that was usable.

None of the EMIS systems includes financial/cost data. The evaluation team deemed this to be a serious deficiency

IEES research activities were characterized by one MOE official as "research by remote control." Though the topics studied were identified in discussions with a group of MOE officials and were topics important to them, he felt that the fact that the research was done was due to IEES initiative; without their initiative, none would have been conducted.

The MOE is funding research to support the work of the National Education Commission. When asked if IEES could do some of the research, one official replied that it would take them too long to get going, let alone finish it. They need information on which to make decisions soon. Another senior MOE official indicated that the "university" research/presentation style was too sophisticated. He made a distinction between the research that universities did and the more "practical" research he felt he needed to inform his decision

making. It was because of this felt need that he was strongly supporting the creation of the Research Unit within the new Planning Unit.

Training

Ninety MOE people have received computer training under IEES auspices--few remain. The RTA agreed that all those trained might as well have left, as the key people left and only a few lower level MOE people remain of the original trainees. One can argue that these people will continue to contribute to the development of Botswana. However, capacity building of the MOE, although the recipient of considerable attention, has in this instance been a failure. This situation is not unique to the IEES project and one that is admittedly extremely difficult to resolve. Training has been shifted to on-the-job type training for the new staff as they are appointed. It would appear that the problem is so pervasive that project-type training will not be an effective solution.

USAID

The evaluation team was advised by MOE officials that they knew little about the amount of money available or what it was being actually being spent for in Botswana. They reported, however, that this was typical of all USAID projects in the country. MOE officials felt that USAID should exercise more control.

Sector Assessment

When queried as to the utility of the IEES conducted Sector Assessment in the preparation of the new long-range plans, the evaluation team was diplomatically told that, "To the extent that it was relevant, it was used."

The RTA was involved in making the projections of enrollment, teachers required, etc. for the Sector Assessment.

Recommendations

1. Research findings should be distilled down into 10 pages or less, with direct implications for management.

2. IEES should wait until any new EMIS unit is formed with the MOE before providing any more assistance.

3. If IEES wants to do something about the lack of trained personnel for the EMIS operations, they should consider doing it through more massive non-project training. It might be possible to someday reach a critical mass of trained people, and then

the EMIS-type operations will be able to find staff who will stay. In the meantime, project training will not even make a dent.

4. The research already started should be completed and help should be provided to MOE personnel to draw out the policy conclusions and implications for the education system.

5. IEES should respond only to specific requests for help that are focused, discrete, short-term, and of a level of sophistication that can be implemented mainly by Batswana.

6. Because there are so many expatriates in Botswana, one must go out of one's way to involve the appropriate Batswana in the management of the activity and to keep the planners informed as to what is going on. We believe that lack of knowledge on the part of the MOE about the management/funding/decisionmaking process in the overall IEES project has detracted from its effectiveness. For what it is worth, this is not the only country where we believe this to be the case with this particular project. Further, the RTA and the SUNY/Albany people are equally in the dark as to the overall management of the activity and share the Batswana feelings.

IEES should provide its personnel in Botswana with a resource allocation. Although the RTA was never refused anything important, she never knew how much money might have been available and felt herself left out of the allocation loop. She felt she could have done more and had more flexibility, if she had known the bigger picture. She felt a lack of control as she was not allowed to manage a certain amount of resources. It was, instead, doled out in the amounts requested.

ANNEX E

Nepal Field Report

NEPAL

Background

The external mid-term evaluation team visited Nepal from October 10 through October 20, 1992 and met with representatives from the MOEC, the USAID Mission, the United Nations Development Programme (UNDP), the World Bank-funded Basic and Primary Education Project (BPEP), Tribhuvan University (TU), New Era (private consulting firm), and an independent consultant familiar with the IEES project (see Annex F).

At the time of the 1988 mid-term evaluation, the IEES project in Nepal covered five areas:

1. Building capacity for evaluation in the radio education project.

2. Improving MOEC capacity to generate reliable data.

3. Initiating research to determine the users of MOEC data and implications for the production of such data.

4. Comprehensive assessment of the education sector.

5. Coordination of external donor activities.

The 1988 evaluation went on to point out a variety of factors and problems that had limited the efficacy and impact of the IEES project in Nepal. The excessive turnover of trained staff in the Manpower and Statistics Unit of the Planning Division at the MOEC and the fact that reporting bodies were not held responsible for the quality of data reported were both identified.

These circumstances have persisted and continue to significantly affect IEES project impact in Nepal.

IEES Phase II began in June 1989, but the commencement of IEES activities in Nepal were late in starting. Although the period of political uncertainty in Nepal lasted for only the first six months of 1990, an IEES Phase II planing visit was not conducted by John Mayo, IEES/Nepal Country Coordinator, and Howard Williams, the RTA, until March-April, 1991. There was, therefore, little or no carryover of the Phase I activity into Phase II as there was a year and a half gap, new personnel, and a new constitution and government.

During the visit, the general terms of the IEES Phase II activities were reviewed and approved. The role for and schedule of IEES Phase II sought to represent continuations and expansions of those initiated during Phase I. The delay, however,

precluded any effective continuity between IEES Phase I and II activities. Proposed activities included:

1. Technical support for planning and implementing an EMIS to meet MOEC needs.

2. Support for strengthening MOEC capacity for monitoring and evaluation, education planning, and proposal/project design.

3. Provision for critical research studies, as targeted by MOEC leadership.

4. Training to operate and sustain EMIS at all levels.

5. Provision of hardware, software, and selected maintenance to expand and strengthen the EMIS.

Phase II of IEES assistance began with the arrival of the IEES RTA, Dr. Howard Williams, on May 2, 1991 and is scheduled to conclude on May 1, 1993. The overall USAID commitment for the current two years of the IEES Phase II is $450,000, including all categorical costs, e.g., RTA, equipment, training, other related program assistance, and FSU indirect costs. Approximately $150,000 of this amount remains to be spent under IEES through May 1993.

The funding for IEES II was based on a transfer of $225,000 from USAID/Nepal to A.I.D./Washington; A.I.D./Washington then contributed $225,000 of its funds to create the $450,000 overall funding for Nepal IEES Phase II. These funds are controlled by A.I.D./Washington, and administered by FSU.

The working procedure for IEES Phase II relies primarily on the daily interaction among the IEES RTA and Planning Division staff to plan and implement project activities. The RTA is assigned to serve as a technical counterpart for the Joint Secretary of the MOEC Planning Division. For practical purposes, however, the RTA works more closely with the Manpower and Statistics (M&S) Section Undersecretary and with the Programme and Evaluation (P&E) Section Undersecretary.

The IEES project activities are said to be guided by the MOEC's Steering Committee, which the Secretary chairs. The MOEC's EMIS Technical Committee, chaired by the Joint Secretary for Planning, oversees the daiiy work of the project.

The Phase II project is focused primarily on the generation of reliable data and research. Through the service of the IEES Resident Advisor, Phase II of IEES has focused its work on the following activities:

1. Daily assistance to the M&S Section, for collection, analyses, and reporting of educational statistics.

2. A national seminar on EMIS.

3. Research on dropouts and repetition designed and implemented with MOEC officials, New Era consulting firm personnel, and TU faculty.

4. Financial support for National Education Commission Report (Rs 60,000).

5. EMIS computer system installation and development: two 386 computers, two HP Laserjet printers, software procured and installed, cabinets, and supplies.

6. Asia region and local training on EMIS for M&S Section and MOEC staff.

7. Organization analysis training for improved technical effectiveness: 3-day, Kathmandu-based training for 6 MOEC officers and researchers.

8. Computer programming, hardware/software development and maintenance: 10-month, Kathmandu-based training for 1 M&S administrative assistant.

9. Lotus spreadsheet use: 1-month, Kathmandu-based training for 1 M&S section officer.

10. EMIS training: 1-month training in Seoul, Korea for 1 M&S section officer.

11. Computer applications training, basic and advanced: 8-week training, based in MOEC M&S Section, for 16 MOEC staff.

Findings

The evaluation team identified four areas of concern that are indicative of the limitations of the IEES project in Nepal.

The EMIS Emphasis:

The IEES project in Nepal has placed a primary emphasis on the development of an EMIS system. The evaluation team noted that virtually all EMIS activities were directed to enhancing the ability of the MOEC staff members to organize, manage, and present educational data. While there is no argument that such skill development at the Ministerial level is valid, any possible impact will be minimal as long as decisionmakers recognize the unreliability of the data that is being processed. IEES activities within the M&S Section have not been successful in addressing the systemic nature of the EMIS problem. The credibility of the incoming data is unknown. The fact that IEES activities have reduced the time necessary to prepare data may lose significance if the data is seriously flawed. Although the problem is admittedly a difficult one, it is regrettable that the IEES project chose not to address it as the system was being developed, in however modest a way, as a critical component of the EMIS effort.

Project Research

Research on grade one repetition and dropouts is the second major focus of IEES/Nepal. A major assumption of this activity appears to be that policy impact will be derived from the findings of the research. The field research is being conducted by a local consulting firm and U.S.-based consultants. Nepali institutional capacity does not benefit, as it might, had the design allowed more direct MOE participation in the "process."

Project Documentation

The evaluation team was duly impressed with the sheer volume of written material that the project has inspired, but distressed at their lack of candor and degree of obscurantism. The legitimate acknowledgement of project successes and the benefits that may come to others from lessons learned is thus severely hindered.

Project Isolation

A review of Nepal EMIS activities prepared by IEES staff proposes that "the most fruitful approach [to increase the evaluation capacity of the Planning Division] may be for the Ministry to develop program evaluation standards along the lines of those developed by the joint American Evaluation and Research Association/American Evaluation Association Committee and adopted by the State of Florida and the Government of Botswana." Although this idea has been abandoned, it is symptomatic of both an unnecessarily limited perspective and a failure of the IEES project to appreciate the importance of an "appropriate technology" in its work with the MOEC. At the time of the evaluation, IEES/Nepal had not been working closely with international agencies in Nepal (e.g., UNDP, ADB, IBRD, etc.) and FSU had not advocated or supported such an orientation. IEES in Nepal has failed to utilize resources and expertise available from international institutions and organizations. The evaluation team believes that a greater emphasis on international comparative educational systems is warranted in a project of this magnitude.

The impact of Phase II has been modest and limited as it has been located almost exclusively within the M&S Section of 5 or 6 staff members. The M&S percentage of the MOEC budget is less than .5%. The idea that the activities of the IEES in Nepal have had any measurable or indeed any impact at all on the ultimate beneficiary--students--or the social/economic development of the country is unrealistic. Any decisions taken that have been influenced by IEES activities in Nepal would not have had time to have had any discernable impact.

The Technical Committee is not a Committee *per se* but the whole unit. Because of the nature of the M&S Section and the role defined for Dr. Williams, the impact he has on policy that bears on the efficiency of the education system is indirect and

derives from the products of the M&S Section, rather than any direct participation in the policy apparatus.

Impact has been indirect and due mainly to the products of the M&S Section doing its day-to-day work of supplying figures and staff support to the people above--not any direct participation in policy formulation.

It was the evaluation team's understanding that the USAID Mission fully funded the PIO/T or other transfer document that provided the resources to the IEES contract to provide Technical Assistance (TA) services to Nepal. We wonder why FSU then entered into a series of contracts (some rather short) with Dr. Williams, rather than contract with him for the full period. Were the Mission funds co-mingled with other funds provided to IEES from several other sources? (Possibly as many as 5 or 6 Missions plus the R&D Bureau.) Did the Nepal bilateral funds lose all identity in the project? If Nepal fully funded the provision of TA for two years and the IEES project had enough resources to contract with Dr. Williams for only short periods of time because of delays in funding from R&D Bureau, where did the Nepal funds go? What would have happened if R&D did not continue funding? We suspect the Mission would have been out of luck. It does not appear to be the case here, but a series of short-term contracts with a TA person could have affected morale and hence performance on the co-mingling issue side, one wonders why IEES did not just write a two year contract "subject to availability of funds" and be done with it.

There is effectively no active USAID/Nepal project management. The Mission does not monitor closely-the new assistant program officer has been in Nepal for only a month and a half.

Support from FSU has been weak and has harmed the program. Equipment has been late in arriving and IEES publications have not been provided to the RTA in a timely manner. FSU has failed to provide a high level of attention to IEES activities in Nepal.

The dropout study would not have been conducted without IEES. IEES initiated the research, but Nepalese chose the topic, which was not one of the topic options proposed by IEES. The Nepali would have done it differently if they were doing it by themselves--smaller and more focused--in a shorter time frame. The field research has been contracted out to New Era, therefore, any capacity building in this regard resulting from the field research resides outside the MOEC.

The radio teacher training project will probably cease to operate as of the end of the school year. The BPEP will not pick it up. The head of BPEP says that the only reason MOEC picked it up this year was because "it was there." The BPEP will probably use educational technologies of a similar type but will not use the existing unit, feeling that the unit was never integrated into the MOEC or the teacher training structure.

16

The head of BPEP, new at the time, did not know about IEES but reported having had a "disastrous" experience with the M&S Section and did not want anything more to do with them until they have demonstrated some capacity to perform.

UNDP plans to support a project to develop the Personnel, Budget, and Financial Management arms of the Planning Unit--as distinct from the M&S Section that the RTA works in.

Dr. Williams will have about four months left when the dropout study is completed. He can start the proposed national regionalization effort but will not get very far. It should probably be continued to the end of the IEES project with short-term people.

The RTA says that the steering committee does not have to meet too often. The evaluation team, however, believes that once a year is not often enough to guide and build a sense of "ownership" by the Nepali participants.

Recommendations

1. Short-term consultations are not effective although they may facilitate some research. The most responsible action would be to extend the RTA to a full two year tour on site, ensure that UNDP will pick up the unit, and do small focused research with IEES support until 1994. Emphasis should be given to distilling what has been learned and usefully packaging it.

2. Short-term IEES consultations could help with smaller focused studies and continue some short-term training. General capacity building would be an activity of dubious value as the M&S is still a unit of only 5 or 6 people.

3. It appears to the evaluation team that the RTA--who the Mission has funded the IEES project to provide--is fulfilling his scope of work. He should be complimented for the close collegial relations he has established with the staff of the M&S Section. The contract of Dr. Williams should be extended to allow him to provide the full two years of TA to the MOEC. He is a resource that is well appreciated by the Ministry and whose work is respected by the members of the donor community with whom he has worked. USAID/Nepal and other donors universally acknowledge the marked improvement of the M&S Section with which he works.

4. The RTA has been less successful in the area of working with the five regions to improve the quality of data at its source. Given the magnitude of the task in the central office, it is not surprising that work in the regional offices has not been started.

5. After the first grade dropout/repetition study has been completed, regionalization would seem to be the next highest priority activity for the RTA and any follow-on assistance by IEES after he departs.

6. The Sector Assessment is obviously a seminal work recognized as a precious contribution of U.S. assistance. Updating of all or priority parts of the Education Sector Assessment would be appropriate and important. It is possible that parts of this task could be carried out while strengthening the regional offices.

7. There is an unresolved difference of opinion as to whether the MOEC should be doing research in-house or contracting it out, as is the case with the dropout study; whether research, if done in-house, should be confined to short-term limited projects or whether it should do long-term activities like the drop-out study; whether it should do focused or comprehensive studies. The evaluation team comes down on the side of a research capacity being developed in the MOEC that can do focused, short-term studies, and manage larger, longer-term efforts contracted out to others.

8. The limited impact of the IEES project is likely to dissolve rapidly unless IEES activities are picked up by anther donor; UNDP has plans.

ANNEX F

Interviewees

INDIVIDUALS CONTACTED IN BOTSWANA

Dr. Shirley A. Burchfield	IEES Resident Technical Advisor
Dr. David Chapman	Principle Research Director, SUNY/Albany
Mr. Allen Gordon	Controller/USAID Botswana
Mr. Handler	Mission Director, USAID/Gabarone
Mr. Matila	Senior Planning Officer, MOE
Mr. Peter O. Molosi	Permanent Secretary, MOE
Mr. Hector Nava	Human Resources Development Officer, USAID/Gabarone
Mr. Eric Odetei	Secretary of National Education Council.
Mr. P.V. Sephuma	Deputy Permanent Secretary, MOE

INDIVIDUALS CONTACTED IN NEPAL

Mr. Bhagyasali Acharya	Assistant Administrative Officer, M&S, MOEC
Mr. Gopal Prasad Adhikara	Section Officer, M&S, MOEC
Mr. Gyaneshwar Amatya	Section Officer, Manpower and Statistics Section, MOEC
Mr. Uttam Amatya	Undersecretary, Programme and Evaluation Section, MOEC
Dr. Chuda Nath Aryal	Tribhuvan University
Mr. Chuman Singh Basnyat	Undersecretary, Manpower and Statistics Section, MOEC
Mr. Jagat Basnyat	Coordinator for MOEC/IEES research, New Era
Mr. Madhup Dhungana	Executive Director, New Era
Mr. Subarna Ram Joshi	Asst. Secretary, National Planning Commission, EMIS Steering Committee
Dr, T. R. Khaniya,	Director, BPEP
Dr. Dibya Man Karmacharya	Tribhuvan University
Mr. Chandra Bahadur Khadka	Regional (Central) Director, MOEC
Mr. Ram Sharan Kharel	Administrative Assistant, Manpower and Statistics Section, MOEC
Mr. Tirtha Bahadur Manadhar	Joint Secretary, Planning Division, MOEC
Mr. Janardan Nepal	Section Officer, P&E, MOEC
Mr. Philip T. O'Meara	UNDP Consultant
Ms. Serene Ong	Programme Officer, UNDP
Mr. Brajesh Panta	World Bank Staff
Ms. Sally Patton	USAID

Dr. P.L. Pradhan	Planning Chief, Tribhuvan University, EMIS Steering Committee
Mr. S.B. Ranjitkar	Evaluation Officer, USAID
Ms. Lalita Thapa	Chief, Social/Public Sector Programme, UNDP
Dr. Ishwar Uphadyaya	Secretary, MOEC
Mr. Bolgopal Vaidaya	Member, NPC
Dr. C. Howard Williams	RTA/IEES
Ms. Teddy Wood-Stevens	Deputy Mission Director USAID